Annual Report CEPID-CeMEAI- 2022 — 2023

Project Title: Center for Mathematical Sciences Applied to Industry
Coordinator: José Alberto Cuminato
Host Institution: ICMC-USP - São Carlos
Fapesp ID Number: 2013/07375-0
Project duration: 01/July/2013—30/June/2024
Report Period: 01/July/2022 — 30/June/2023
Report Number: 10

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1.   Introduction and Summary of the Initial Plan

1.1   INTRODUCTION

This report describes the activities of the Center for Mathematical Sciences Applied to Industry (RIDC-CeMEAI) for the period July/2022 through to June/2023. In this tenth-year period of the project, the majority of the activities promised in the initial proposal have been implemented. New proposals have been taken on board, be they from industry or from funding agencies. The CPA-IA IARA - Artificial Intelligence in the Remaking of Urban Environments (led by André C. P. L. F de Carvalho) is on the edge of the beginning. A new CPA proposal with UNICAMP, UNESP and SENAI is on the way. The ICMC EMBRAPII Unit was approved and we expect new projects as a result of it. The charging (tarifação) of the Cluster is working and CeMEAI already has a client using it. The Education and Knowledge Dissemination coordination has been very active as we shall describe in the main body of the report. The project manager has been working full time to increase contacts with industries resulting in new projects and collaborations. In section 1.3 of this report, we present a summary of the progress made during the period. Table 1.1 brings a quantitative summary of the Center's academic output. In the main body of this report, we shall present in detail the activities of the RIDC-CeMEAI for each of its main three research groups, including projects with industry that have been contracted during this report period.

1.2   SUMMARY FOR THE 2018 PROPOSAL AND ITS GOALS

The State of São Paulo concentrates a large part of the industry in Brazil and also many of the best academic research institutions. However, mainly due to a lack of coordination, the industry/academia interaction has not yet grown in the region. Due to the nature, complexity, and scale of the activities proposed in this project, we expect the Center will need some time to mature and accomplish the proposed schedule. In addition, the very nature of the Center is interdisciplinary as it involves groups in several areas of applied mathematics, statistics, and computer science. This is very important for the success of the Center because the problems coming from the industry are very often multidisciplinary in their nature. Another long-term objective result from the fact that Brazil has a severe shortage of human resources trained for working in industrial/government problems. Our mathematical sciences courses (undergraduate and graduate) nowadays focus on the training of students to be good academics and not on working alongside multidisciplinary teams for practical problem-solving. On the other hand, the industry itself is not used to seeking help from academia, especially from mathematicians. We are aware that all of these difficulties are very complex and we are not going to solve all of them by starting this center. However, we do believe that by starting this Center we can enhance the usage of mathematical techniques by the industrial sector and disseminate this practice.

The justification for the renewal of the proposed project of RIDC-CeMEAI lies in the fact that in spite that the use of mathematics by industries in Brazil being a novelty, RIDC-CeMEAI managed in 5 years to attract a considerable number of projects, and is changing the scenario described in the previous paragraph. In the beginning, the Center´s activity was not known by companies, so we had to make a lot of effort to get projects from the industry. Now, this is starting to change and many times we get contact from industries willing to work with us. So the continuation of the funding from Fapesp will be crucial to solidify this interest and make the Center a new thrust for the development of São Paulo State. The extension of the Center will make it stronger and will help to accomplish its mission set forth in the initial plan.

1. The RIDC-CeMEAI will continue to be a Center for the production and diffusion of knowledge in applied mathematical sciences, identifying potential problems and areas which require attention, enabling the interaction between researchers and industries in these areas. More specifically, the RIDC-CeMEAI will promote contact between experts in the mathematical sciences and entrepreneurs, industry workers, researchers, and practitioners from other fields of knowledge.

2. The RIDC-CeMEAI will continue to provide an adequate environment and structure for the development of applied research to the whole industrial sector including healthcare, financial, agriculture, and trade.

3. The RIDC-CeMEAI has been working towards building a solid and lasting multidisciplinary community by training students to become able to collaborate in solving practical problems and to be prepared to replicate the center's philosophy in other regions of the country.

4. The RIDC-CEMEAI is hard-working toward becoming an international reference for successful cooperation between academia and industry/government in mathematical sciences.

1.3 SUMMARY OF ACHIEVEMENTS JULY 2022 – JUNE 2023

A primary objective of this project is to produce a virtuous cycle going from high-level mathematical research to applications and vice versa.

During the period of this report, 326 papers in scientific journals have been published by the 37 principal and 66 associate investigators of CeMEAI.

In the present report, 8 projects that describe collaborations with industry as well as with public and private "non-Mathematical" institutions are reported. Most of these projects have already resulted in scientific publications, as is also the case of the PhD Thesis being advised by members of CeMEAI, in the period.

Diffusion and Educational activities have been exponentially incremented in this period, as can be verified in the sections: diffusion and short courses, Mathematical Clinic activities, production of videos, support for seminars highlighting applications and surprising facts of Mathematics, press releases and movie screening. See Table 1.1

The MBA on Data Science is on its fourth edition with 270 students, more than 500 students have already completed the MBA in the first three editions and the fifth edition is planned for 2024.

TABLE 1.1: PROJECT MAIN ACTIVITIES - SUMMARY 2022-2023

Activity	Total
Students and Visiting Scholars	
Ongoing & Completed Post-doctorate	100
Ongoing Ph.D.'s	261
Ongoing Masters	209
Completed Ph. D.'s	43
Completed Masters	67
Research	
Books	3
Book Chapters	38
Papers	326
Papers in Conferences	170
Awards	34
Innovation and Technology Transfer (KTT)	
Meetings with Partners	39
New Contracts with Partners	4
Education and Knowledge Diffusion	
Videos Produced	106
Video Views	15.014
Press Releases	56
Website Views	59.328

1.4 AWARDS

1. 2022 SIBGRAPI 2022 35th Conference on Graphics, Pathers and Images
   - Honourable Mention Awards on Graphics Visualization of the Main Track - ´´Counting Particles: A Simple and Fast Surface Reconstruction Method for Particle-Based Fluids". Filomen Incahuanaco Quispe and **Afonso Paiva** [124]
   - Ph.D. Thesis Honorable Mention Award of the Workshop of Theses and Dissertations (WTD) - ´´Avoiding Overfitting: New Algorithms to Improve Generalization in Convolutional Neural Networks". Claudio F Santos and **João Paulo Papa**

2. 2022 KDMile 2022 - Sociedade Brasileira de Computação
   - Best Paper - ´´Characterizing instance hardness in classification and regression problems". Gustavo P. Torquette, Victor S. Nunes, Pedro Y. A. Paiva, Lourenço B. Cunha Neto, **Ana C. Lorena**[162]
   - 2nd Best Paper - ´´Unsupervised Heterogeneous Graph Neural Network for Hit Song Prediction through One Class Learning" Angelo Cesar Mendes da Silva, Marcos Paulo Silva Gôlo, **Ricardo Marcondes Marcacini** [146]

3. 2023 Helmholtz Information Data Science Award, Helmholtz Information Data Science Academy.
   - PhD student Anderson Paulo Avila Santos - Supervisor **André C. P. de L. F. de Carvalho**
   - PhD student Robson Bonidia - Supervisor **André C. P. de L. F. de Carvalho**

4. 2022 The Marguerite Frank Award for the best EJCO paper 2022 - ´´ Robot Dance: A mathematical optimization platform for intervention against COVID-19 in a complex network." **Luis Gustavo Nonato**, Pedro Peixoto, **Tiago Pereira**, **Claudia Sagastizábal** and **Paulo J.S. Silva**. More information: `https://doi.org/10.1016/j.ejco.2023.100065`

5. 2022 I UNESP Award - Destaque Mulheres Cientistas - Member **Helenice de Oliveira Florentino Silva**

6. 2022 AIAA 2022 Sustained Service Award, American Institute of Aeronautics and Astronautics - AIAA. Member **Joao Luiz Filgueiras de Azevedo**

7. 2022 Engenharia Mecânica Brasileira Award, Associação Brasileira de Engenharia e Ciências Mecânicas - ABCM. Member **Joao Luiz Filgueiras de Azevedo**

8. 2023 Capes Thesis Mention of Honor Award - Computing - Gustavo Henrique de Rosa. PhD Thesis "Geração de Linguagem Natural Utilizando Aprendizado Adversarial Baseado em Similaridade." Supervisor: **João Paulo Papa**.

9. 2022 Sebrai - SP Future Startups - IAssist Tecnologia - Member: **João Paulo Papa**.
   `https://sp.agenciasebrae.com.br/inovacao-e-tecnologia/sebrae-for-startups-premia-103-deep-techs-`

10. 2023 Su Buchin Prize 2023, International Council for Industrial and Applied Mathematics. Member: **Jose Mario Martinez Perez**

11. 2023 Honourable Mention Awards on Prêmio Clóvis Caesar Gonzaga (SBMAC). M.Sc. Thesis ´´Roteamento de aeronaves sob incertezas via otimização robusta." Rafael Ajudarte de Campos. Supervisor **Pedro Augusto Munari Junior**
    `More information: https://cemeai.icmc.usp.br/pesquisadores-do-cemeai-orientam-artigos-homenagea`

12. 2022 Best Thesis Awards on Prêmio Clóvis Caesar Gonzaga (SBMAC). M.Sc. Thesis ´´Data-driven mathematical models for assessing the COVID-19: SIRD- type equations." Fabio Vinicius Góes Amaral. Supervisors: **Cássio Machiaveli Oishi** and **Wallace Correa de Oliveira Casaca**

13. 2023 Best Thesis Awards on Prêmio Marco Antonio Raupp (SBMAC). PhD. Thesis ´´Chaotic behaviour in diffusively coupled systems." Fernando Cordeiro de Queiroz. Supervisor **Tiago Pereira da Silva**
    More information: `https://cemeai.icmc.usp.br/pesquisadores-do-cemeai-orientam-artigos-homenageados`

14. 2022 Top 2% World Scientist., Univ. of Stanford and Plos Biology.
    `DOI: 10.17632/btchxktzyw.3.`
    Member: **Anderson Rezende Rocha** (single year)
    Member: **André Carlos Ponce de Leon Ferreira de Carvalho** (career and single year)
    Member: **Fábio Gagliardi Cozman** (career and single year)
    Member: **João Paulo Papa** (career and single year)
    Member: **José Mario Martinez Perez** (career and single year)
    Member: **Liang Zhao** (career)
    Member: **Moacir Ponti** (single year)
    Member: **Rodolfo Ipolito Meneguette** (single year)

15. 2023 Top 34 Computer Scientists in Brasil (D-index > 30).
    `https://research.com/scientists-rankings/computer-science/br`
    Member: **Anderson Rezende Rocha** (18th)
    Member: **André Carlos Ponce de Leon Ferreira de Carvalho** (11th)
    Member: **Ernesto G. Birgin** (35th)
    Member: **João Paulo Papa** (13th)

16. 2023 Top 22 Mathematics Scientists in Brasil (D-index > 30).
    `https://research.com/scientists-rankings/mathematics/br`
    Member: **Claudia Sagastizábal** (21th)
    Member: **Ernesto G. Birgin** (15th)
    Member: **José Mario Martinez Perez** (2nd)
    Member: **Reinaldo Morabito** (10th)

17. 2023 Top 30 Engineering and Technology Scientists in Brasil (D-index > 30).
    `https://research.com/scientists-rankings/engineering-and-technology/br`
    Member: **José Mario Martinez Perez** (1nd)
    Member: **Reinaldo Morabito** (8th)

2. Research Team

2.1 COORDINATION

- **Center Director:** José Alberto Cuminato - ICMC-USP

- **Deputy Director:** José Mario Martinez Perez - IMECC-UNICAMP

- **Education and Knowledge Dissemination Coordinator:** Lúcio Tunes dos Santos - IMECC- UNICAMP

- **Technology Transfer Coordinator:** Francisco Louzada Neto - ICMC-USP

- **RIDC Executive Manager:** Maria Fernanda Marreta -ICMC- USP

- **Manager of Education and Dissemination of Knowledge:** Gustavo Blengini Faria - ICMC-USP

2.2 PRINCIPAL INVESTIGATORS

Optimization and Operations research

Roberto **Andreani** (IMECC-UNICAMP), Ernesto G. **Birgin** (USP), Maicon Ribeiro **Correa** (IMECC-UNICAMP), Carlile **Lavor** (IMECC-UNICAMP), José Mario **Martínez Perez** (IMECC-UNICAMP), Pedro Augusto **Munari Junior** (UFSCar), Débora P. **Ronconi** (USP), Claudia Alejandra **Sagastizábal** (IMECC-UNICAMP), Sandra A. **Santos** (Unicamp), Maristela Oliveira dos **Santos** (ICMC-USP), Lucio Tunes dos **Santos** (IMECC-UNICAMP), Geraldo Nunes **Silva** (UNESP), Paulo J. S. **Silva** (IMECC-UNICAMPp), Maria do **Socorro Rangel** (UNESP) and Franklina M. B. **Toledo** (ICMC-USP).

Fluid Dynamics

João Luiz F. **Azevedo** (IAE), Gustavo Carlos **Buscaglia** (ICMC-USP), Antonio **Castelo Filho** (ICMC-USP), José Alberto **Cuminato** (ICMC-USP), Cassio M. **Oishi** (UNESP), Tiago **Pereira da Silva** (ICMC-USP), Fabrício Simeoni de **Sousa** (ICMC-USP), Leandro Franco de **Souza** (ICMC-USP)

Statistics and Data Sciences

Vicente Garibay **Cancho** (ICMC-USP), Kalinka Regina Lucas Jaquie **Castelo Branco** (ICMC-USP), Nuno Manuel Morgadinho dos Santos **Coelho** (FDRP-USP), Alexandre Cláudio Bottazo **Delbem** (ICMC-USP), Nikolai V.

Kolev (IME-USP), Zhao **Liang** (FFCLRP-USP), Francisco **Louzada** (ICMC-USP), Luis Gustavo **Nonato** (ICMC-USP), João Paulo **Papa** (UNESP), Francisco Aparecido **Rodrigues** (ICMC-USP), Mariá Cristina Vasconcelos Nascimento **Rosset** (UNIFESP), Jó **Ueyama** (ICMC-USP) Adenilso da Silva **Simão** (ICMC-USP)and Julio **Stern** (IME-USP).

2.3   ASSOCIATE INVESTIGATORS

Optimization and Operations research

Marina **Andretta** (USP), Silvio A. de **Araujo**(UNESP), Victor Claudio Bento de **Camargo** (UFSCar) Eduardo Fontoura **Costa** (ICMC-USP), Aline Aparecida de Souza **Leão** (USP), Reinaldo **Morabito Neto** UFSCar, Valeriano Antunes de **Oliveira** (UNESP), Vitória **Pureza** (UFSCar), Helenice de Oliveira Florentino **Silva** (UNESP) and Edilaine Martins **Soler** (UNESP).

Fluid Dynamics

Roberto F. **Ausas** (ICMC-USP), Livia Souza Freire **Grion** (ICMC-USP), Adolfo Gomes **Marto** (IAE), José Antonio **Rabi** (FZEA-USP), Maria Luísa Colluci da Costa **Reis** (IAE), Roberto Gil Annes da **Silva** (ITA), Edson Cezar **Wendland** (EESC-USP) and William Roberto **Wolf** (FEM-UNICAMP).

Statistics and Data Sciences

Carlos **Affonso** (UNESP, Itapeva), Marinho G. **Andrade Filho** (ICMC-USP), Walther **Azzolini Júnior** (EESC-USP), Dennis **Brandão** (EESC-USP), Wallace Correa de Oliveira **Casaca** (UNESP), André C P L F de **Carvalho** (ICMC-USP), Katiane Silva **Conceição** (ICMC-USP), Fabio Gagliardi **Cozman** (EP-USP), Mariana **Curi** (ICMC-USP), Ronaldo **Dias** (IMECC-UNICAMP), Carlos A. R. **Diniz** (UFSCar), Júlio Cézar **Estrella** (ICMC-USP), André **Fujita** (IME-USP), Filippo **Ghiglieno** (UFSCar), Jorge Luis Bazan **Guzman** (ICMC-USP), Seiji **Isotani**(ICMC-USP), Bruno **Kimura** (UNIFESP), Marcelo de Souza **Lauretto** (EACH-USP), Ana Carolina **Lorena** (ITA), Ricardo Marcondes **Marcacini** (ICMC-USP), Marcello Augusto Faraco de **Medeiros** (EESC-USP), Eduardo Mario **Mendiondo** (EESC-USP), Rodolfo Ipolito **Meneguette** (ICMC-USP), Diego Carvalho do **Nascimento** (UDA-Chile), Cibele Maria Russo **Novelli** (ICMC-USP), Krerley Irraciel Martins **Oliveira** (UFAL), Moacir de Miranda **Oliveira Junior** (FEA-USP), Afonso **Paiva Neto** (ICMC-USP), Gleici da Silva Castro **Perdoná** (FMRP-USP), Thomas Kaue Dal Maso **Peron** (ICMC-USP), Moacir Antonelli **Ponti** (ICMC-USP), Pedro Luiz **Ramos** (PUC-Chile) Dimas Betioli **Ribeiro** (ITA), Evandro Marcos Saidel **Ribeiro** (USP), Laura Leticia Ramos **Rifo** (IMECC-UNICAMP). Ricardo Araújo **Rios** (UFBA), Tatiane Nogueira **Rios** (UFBA), Anderson de Resende **Rocha** (IC-UNICAMP), Oscar Mauricio Hernandez **Rodriguez** (EESC-USP), André Luis Debiaso **Rossi** UNESP, João Carlos **Setubal** (IQ-USP), Paulo Henrique Ferreira da **Silva** (UFBA), Secundino **Soares Filho** (FEEC-UNICAMP), Anderson Luiz Ara **Souza** (UFPR) Adriano K. **Suzuki** (ICMC-USP), Renato **Tinós** (FFCLRP-USP) and Claudio Fabiano Motta **Toledo** (ICMC-USP) and Vera Lucia Damasceno **Tomazella** (UFSCar).

2.4   COMPLETED AND ONGOING POST-DOCTORATE PROJECTS

Ongoing

1. Adriano Rivolli da Silva. Start: 2023. ICMC - USP, TJ-SP. Supervisor: André Carlos Ponce de Leon Ferreira de Carvalho

2. Ahmed Esmin. Start: 2022. IC - UNICAMP, Shell Inc.. Supervisor: Anderson Rocha

3. Alex Marino Gonçalves de Almeida. Start: 2022. ICMC - USP, TJ-SP. Supervisor: André Carlos Ponce de Leon Ferreira de Carvalho

4. Angelica Caseri. Start: 2022. ICMC - USP. Supervisor: Francisco Aparecido Rodrigues

5. Antone dos Santos Benedito. Start: 2021. UNESP, FAPESP. Supervisor: Helenice de Oliveira Florentino Silva

6. Armando Maciel Toda. Start: 2021. ICMC - USP, CNPq. Supervisor: Seiji Isotani

7. Bernardo Nunes Gonçalves. Start: 2020. EP-USP, FAPESP. Supervisor: Fabio Gagliardi Cozman

8. Caetano Mazzoni Ranieri. Start: 2021. ICMC - USP, FAPESP. Supervisor: Jó Ueyama

9. Cláudia Aline Azevedo dos Santos Mesquita. Start: 2023. ICMC - USP. Supervisor: Katiane Silva Conceição

10. Daiane de Souza Santos. Start: 2023. ICMC - USP, FAPESP. Supervisor: Vicente Garibay Cancho

11. Daniel Oliveira Dantas. Start: 2021. IME-USP, Pró-Reitoria de Pesquisa da USP. Supervisor: André Fujita

12. Daniela Lopes Freire. Start: 2020. ICMC - USP, TJ-SP. Supervisor: André Carlos Ponce de Leon Ferreira de Carvalho

13. Danielli Araújo Lima. Start: 2020. ICMC - USP. Supervisor: Seiji Isotani

14. Danilo Rodrigues de Souza. Start: 2023. IME-USP, FAPESP. Supervisor: Ernesto Julián Goldberg Birgin

15. Danilo Samuel Jodas. Start: 2019. UNESP, FAPESP. Supervisor: João Paulo Papa

16. Davi Pereira dos Santos. Start: 2022. ICMC - USP. FUSP. Supervisor: André Carlos Ponce de Leon Ferreira de Carvalho

17. Diego Trindade de Souza. Start: 2020. IME-USP, Pró-Reitoria de Pesquisa da USP. Supervisor: André Fujita

18. Diogo Henrique da Silva. Start: 2021. ICMC - USP, FAPESP. Supervisor: Francisco Aparecido Rodrigues

19. Douglas Donizeti de Castilho Braz. Start: 2022. ICMC - USP, Volt Robotics. Supervisor: André Carlos Ponce de Leon Ferreira de Carvalho

20. Douglas Rodrigues. Start: 2023. UNESP, FAPESP. Supervisor: João Paulo Papa

21. Eddie Nijholt. Start: 2020. ICMC - USP. Supervisor: Tiago Pereira da Silva

22. Eduardo Ramos. Start: 2020. ICMC - USP. Supervisor: Francisco Louzada Neto

23. Ellen Souza. Start: 2020. ICMC - USP, Câmara dos Deputados. Supervisor: André Carlos Ponce de Leon Ferreira de Carvalho

24. Erika Capelato. Start: 2021. ICMC - USP. Supervisor: Mariana Cúri

25. Fabio Santiago. Start: 2022. ITA, CAPES. Supervisor: Ana Carolina Lorena

26. Fabíola S. F. Pereira. Start: 2018. ICMC - USP, Algar Telecom. Supervisor: André Carlos Ponce de Leon Ferreira de Carvalho

27. Farney Coutinho Moreira. Start: 2021. ITA, FAPESP. Supervisor: Joao Luiz Filgueiras de Azevedo

28. Gabriel Cirac. Start: 2021. IC - UNICAMP, Shell Inc.. Supervisor: Anderson Rocha

29. Geovane Augusto Haveroth. Start: 2022. UNICAMP, FAPESP. Supervisor: Maicon Ribeiro Correa

30. Gustavo Bochio. Start: 2019. ICMC - USP, ANP-Petrobras. Supervisor: José Alberto Cuminato and Francisco Louzada Neto

31. HUGO ALBERTO CASTILLO SANCHEZ. Start: 2021. ICMC - USP, FAPESP. Supervisor: Antonio Castelo Filho

32. hugo de oliveira. Start: 2022. ICMC - USP, FAPESP. Supervisor: José Alberto Cuminato

33. João Luiz Junho Pereira. Start: 2022. ITA, FAPESP. Supervisor: Ana Carolina Lorena

34. Jorge Yoshio Kanda. Start: 2022. ICMC - USP. Supervisor: André Carlos Ponce de Leon Ferreira de Carvalho

35. José Angel Riveaux Meriño. Start: 2022. EP-USP, FAPESP. Supervisor: Débora Pretti Ronconi and Ernesto Julián Goldberg Birgin

36. Jose Augusto Lustosa Filho. Start: 2022. IC - UNICAMP, Shell Inc.. Supervisor: Anderson Rocha

37. José Henrique de Andrade. Start: 2020. USP. Supervisor: Walther Azzolini Júnior

38. Jovani de Souza. Start: 2022. UNESP. Supervisor: Helenice de Oliveira Florentino Silva

39. Juliana Mara Pinto de Almeida. Start: 2021. UFSCar, FAPESP. Supervisor: Filippo Ghiglieno

40. Kamyla Maria Ferreira. Start: 2022. UFSCar, FAPESP. Supervisor: Pedro Augusto Munari Junior

41. Leandro Aparecido Passos Júnior. Start: 2023. UNESP, FAPESP. Supervisor: João Paulo Papa

42. LUAN CARLOS DE SENA MONTEIRO OZELIM. Start: 2022. ITA. Supervisor: Dimas Betioli Ribeiro

43. Luciano Campanini. Start: 2020. USP. Supervisor: Walther Azzolini Júnior

44. Luis Claudio Sugi Afonso. Start: 2021. UNESP. Supervisor: João Paulo Papa

45. Luis Hideo Vasconcelos Nakamura. Start: 2023. ICMC - USP. Supervisor: Rodolfo Ipolito Meneguette

46. Manuel Castro Avila. Start: 2020. IC - UNICAMP, Shell Inc.. Supervisor: Anderson Rocha

47. Marcelo Meireles dos Santos. Start: 2021. IME-USP, Pró-Reitoria de Pesquisa da USP. Supervisor: André Fujita

48. Marcelo Zampieri. Start: 2022. IC - UNICAMP, Shell Inc.. Supervisor: Anderson Rocha

49. Marcio Dias. Start: 2021. ICMC - USP, PRP USP. Supervisor: André Carlos Ponce de Leon Ferreira de Carvalho

50. Marcos Cirne. Start: 2018. IC - UNICAMP, Motorola Mobility. Supervisor: Anderson Rocha

51. Marcos Cleison Silva Santana. Start: 2022. UNESP, SpotOn. Supervisor: João Paulo Papa

52. Marcos Roberto Fortulan. Start: 2020. USP, FIPAI. Supervisor: Oscar Mauricio Hernandez Rodriguez

53. Marcos Severo. Start: 2021. IME-USP, Pró-Reitoria de Pesquisa da USP. Supervisor: André Fujita

54. Marlon Mauricio Hernández Cely. Start: 2018. USP, FUNCAMP. Supervisor: Oscar Mauricio Hernandez Rodriguez

55. Matheus Tozo de Araujo. Start: 2022. ICMC - USP. Supervisor: Livia Souza Freire Grion

56. Michael Macedo Diniz. Start: 2023. IC - UNICAMP, Shell Inc.. Supervisor: Anderson Rocha

57. Murillo Guimarães Carneiro. Start: 2023. USP, FUSP. Supervisor: Zhao Liang

58. Murilo Garcia de Matos Amaral.. Start: 2022. IC - UNICAMP, Shell Inc.. Supervisor: Anderson Rocha

59. Nádia Félix Felipe da Silva. Start: 2020. ICMC - USP, Câmara dos Deputados. Supervisor: André Carlos Ponce de Leon Ferreira de Carvalho

60. Nastaran Lotfi. Start: 2021. ICMC - USP, FAPESP. Supervisor: Francisco Aparecido Rodrigues

61. Oilson Alberto Gonzatto Junior. Start: 2021. ICMC - USP. Supervisor: Francisco Louzada Neto

62. Oscar Cuadros Linares. Start: 2022. IC - UNICAMP, Shell Inc.. Supervisor: Anderson Rocha

63. Pablo Giovanni Silva Carvalho. Start: 2023. ICMC-USP, FAPESP. Supervisor: Fabrício Simeoni de Sousa

64. Pedro Ribeiro Mendes Jr.. Start: 2020. IC - UNICAMP, Shell Inc.. Supervisor: Anderson Rocha

65. Rafael de Oliveira Werneck. Start: 2020. IC - UNICAMP, Shell Inc.. Supervisor: Anderson Rocha

66. Renato Fuzaro Miotto. Start: 2022. UNICAMP, FAPESP. Supervisor: William Roberto Wolf

67. Rômulo Brito da Silva. Start: 2023. UNESP, CNPq. Supervisor: Cassio Machiaveli Oishi

68. Rosalía Taboada Leiva. Start: 2022. ICMC - USP. Supervisor: Antonio Castelo Filho and José Alberto Cuminato

69. Ruben Interian Kovaliova. Start: 2022. ICMC - USP, FAPESP. Supervisor: Francisco Aparecido Rodrigues

70. Rubens Augusto Amaro Junior. Start: 2022. ICMC-USP, FAPESP. Supervisor: Fabrício Simeoni de Sousa

71. Somayeh Khezri. Start: 2022. UNICAMP, FAPESP. Supervisor: Paulo José da Silva e Silva

72. Víctor Eduardo Martínez Abaunza. Start: 2019. IC - UNICAMP, FAPESP. Supervisor: Anderson Rocha

73. Vicytor Hugo Barella. Start: 2021. ICMC - USP. Supervisor: Luis Gustavo Nonato

74. Williams Jesus Lopez Yanez. Start: 2022. IMECC - UNICAMP, FAPESP. Supervisor: Claudia Alejandra Sagastizábal and Paulo José da Silva e Silva

Completed in the period

1. Ana Carolina Simionato Arakaki. 2022. ICMC - USP, . Supervisor: Seiji Isotani.

2. Andrea Maria Machado Ribeiro. 2023. ICMC-USP. Supervisor: Alexandre Cláudio Botazzo Delbem.

3. Angelo Aliano Filho. 2023. UFSCar, . Supervisor: Reinaldo Morabito Neto.

4. Armando Maciel Toda. 2022. ICMC - USP, . Supervisor: Rodolfo Ipolito Meneguette.

5. Bruno Elias Penteado. 2022. ICMC - USP, . Supervisor: Rodolfo Ipolito Meneguette.

6. Caroline de Arruda Signorini. 2023. UNESP, . Supervisor: Silvio Alexandre de Araujo.

7. Clayton Reginaldo Pereira. 2022. UNESP, CAPES. Supervisor: João Paulo Papa.

8. Douglas Rodrigues. 2022. UNESP, Petrobras. Supervisor: João Paulo Papa.

9. Franciane Fracalossi Rocha. 2022. ICMC - USP, Petrobras. Supervisor: Fabrício Simeoni de Sousa.

10. Francisco Júlio do Nascimento. 2022. USP, FIPAI. Supervisor: Oscar Mauricio Hernandez Rodriguez.

11. Gilson Shimizu. 2022. ICMC - USP, PRP USP. Supervisor: André Carlos Ponce de Leon Ferreira de Carvalho.

12. Guilherme Freire Roberto. 2022. ICMC - USP, Petrobras Transporte S.A. Supervisor: André Carlos Ponce de Leon Ferreira de Carvalho.

13. Ivan Passoni. 2022. IC - UNICAMP, Shell Inc.. Supervisor: Anderson de Rezende Rocha.

14. José Gilberto Rinaldi. 2022. UFSCar, . Supervisor: Reinaldo Morabito Neto.

15. Kelly Cristina Ramos da Silva. 2023. ICMC - USP, TJ-SP. Supervisor: André Carlos Ponce de Leon Ferreira de Carvalho.

16. Leopoldo Andre Dutra Lusquino Filho. 2022. IC - UNICAMP, Shell Inc.. Supervisor: Anderson de Rezende Rocha.

17. Luca Meacci. 2022. ICMC - USP, Pró-Reitoria de Pesquisa USP. Supervisor: Fabrício Simeoni de Sousa.

18. Luisa Amélia Paseto. 2022. ICMC - USP, PRP USP. Supervisor: André Carlos Ponce de Leon Ferreira de Carvalho.

19. Müller Moreira Souza Lopes. 2023. UNESP, FAPESP. Supervisor: Cassio Machiaveli Oishi.

20. Rita Santos Guimarães. 2023. UNICAMP, FAPESP. Supervisor: Lúcio Tunes dos Santos.

21. Rodrigo Contreras. 2022. ICMC - USP, CNPq. Supervisor: Luis Gustavo Nonato.

22. Samuel Conceição de Oliveira. 2022. UNESP, . Supervisor: Helenice de Oliveira Florentino Silva.

23. Taiane Coelho Ramos. 2022. ICMC - USP, Wellcome Leap. Supervisor: André Carlos Ponce de Leon Ferreira de Carvalho.

24. Thalita Monteiro Obal. 2023. UNESP, . Supervisor: Edilaine Martins Soler.

25. Valdemar Abrão Devesse. 2022. ICMC - USP, Volt Robotics. Supervisor: André Carlos Ponce de Leon Ferreira de Carvalho.

26. Vitor Hugo De Sousa Ferreira. 2022. IC - UNICAMP, Shell Inc.. Supervisor: Anderson de Rezende Rocha.

Table 2.1 displays the Post-Doc grants awarded to members of the project during the report period, discriminated by the funding agency. The purpose of this table is to give an idea of the amount of grants awarded to CeMEAI from other funds than those of the project.

TABLE 2.1: POST-DOC GRANTS AWARDED (P) - PUBLIC FUNDS - (PR) - PRIVATE FUNDS

Funding	Completed	Ongoing
Fapesp (P)	2	25
Capes (P)	1	1
CNPq (P)	1	2
Petrobras (Pr)	3	1
TJ (Pr)	1	3
Shell (Pr)	3	10
Câmara dos Deputados (Pr)	1	2
Volt Robotics (Pr)	1	2
Algar Telecom (Pr)	0	1
FUSP/PRP USP (Pr) (P)	3	5
FIPAI (Pr) (P)	1	1
FUNCAMP (Pr) (P)	0	1
Motorola (Pr)	0	1
SpotOn (Pr)	0	1

3. High Impact Research and Projects

3.1 INTRODUCTION

This Chapter describes CeMEAI's research projects of greatest impact either financially, scientifically or socially. Other projects can be found in the section **Projects** of the CeMEAI's website.

(http://www.cemeai.icmc.usp.br/projetos).

We start with the impact of CeMEAI's publications, **Table 3.1** shows the current h-index of the Center´s publications since the beginning of the project.

TABLE 3.1: H-INDEX (2013-2023)

Site	h-index	Citations
Web of Science	64	28.389
Google Scholar	90	48.183

Google Scholar: `https://scholar.google.com.br/citations?user=qxiSYp4AAAAJ&hl=pt-BR`
Web of Science: `https://www.webofscience.com/wos/author/record/J-2417-2015`

3.2 HIGH IMPACT PUBLICATIONS

3.2.1 MOST CITED PAPERS 2022-2023

• **Boldfaced names** are members of CeMEAI

- W. Oliveira, J. Hamari, L. Shi, A. M. Toda, L. Rodrigues, P. T. Palomino, **S. Isotani**. "Tailored gamification in education: A literature review and future agenda". In:*Education and Information Technologies* , Vol. 28, No. 1, jan 2023, pp. 373–406.
  DOI: `10.1007/s10639-022-11122-4`

  43 (Google Scholar) 9 (Web of Science)

- C. Kong, B. Chen, H. Li, S. Wang, **A. Rocha**, and S. Kwong. "Detect and Locate: Exposing Face Manipulation by Semantic- and Noise-Level Telltales". In: *IEEE Transactions on Information Forensics and Security* 17 (2022), pp. 1741–1756.
  DOI: `10.1109/tifs.2022.3169921`

19 (Google Scholar) 6 (Web of Science)

- **R. Andreani**, W. Gómez, G. Haeser, L. M. Mito, and A. Ramos. "On Optimality Conditions for Nonlinear Conic Programming". In: Mathematics of Operations Research 47.3 (Aug. 2022), pp. 2160–2185.
  DOI: `10.1287/moor.2021.1203`

  17 (Google Scholar) 5 (Web of Science)

- A. F. Araujo, M. P. S. Gôlo, and **R. M. Marcacini**. "Opinion mining for app reviews: an analysis of textual representation and predictive models". In: *Automated Software Engineering* 29.1 (Oct. 2021).
  DOI: `10.1007/s10515-021-00301-1`

  15 (Google Scholar) 7 (Web of Science)

- A. Theophilo, R. Giot, and **A. Rocha**. "Authorship Attribution of Social Media Messages". In: *IEEE Transactions on Computational Social Systems* 10.1 (Feb. 2023), pp. 10–23.
  DOI: `10.1109/tcss.2021.3123895`

  14 (Google Scholar) 4 (Web of Science)

- J. Santos, I. Bittencourt, M. Reis, G. Chalco, and **S. Isotani**. "Two billion registered students affected by stereotyped educational environments: an analysis of gender-based color bias". In: *Humanities and Social Sciences Communications* 9.1 (July 2022).
  DOI: `10.1057/s41599-022-01220-6`

  11 (Google Scholar) 1 (Web of Science)

- S. M. Mastelini, D. R. Cassar, E. Alcobaça, T. Botari, **A. C. de Carvalho**, and E. D. Zanotto. "Machine learning unveils composition-property relationships in chalcogenide glasses". In:*Acta Materialia* 240 (Nov. 2022), p. 118302.
  DOI: `10.1016/j.actamat.2022.118302`

  11 (Google Scholar) 4 (Web of Science)

- V. S. Amaral, **R. Andreani**, **E. G. Birgin**, D. S. Marcondes, and**J. M. Martínez**. "On complexity and convergence of high-order coordinate descent algorithms for smooth nonconvex box-constrained minimization". In: *Journal of Global Optimization* 84.3 (Apr. 2022), pp. 527–561.
  DOI: `10.1007/s10898-022-01168-6`

  11 (Google Scholar) 3 (Web of Science)

- E. Nijholt, J. L. Ocampo-Espindola, D. Eroglu, I. Z. Kiss, and **T. Pereira**. "Emergent hypernetworks in weakly coupled oscillators". In: *Nature Communications* 13.1 (Aug. 2022).
  DOI: `10.1038/s41467-022-32282-4`

  7 (Google Scholar) 2 (Web of Science)

3.2.2 PAPERS IN HIGH IMPACT JOURNALS 2022-2023 (JCR>5)

Tables 3.2 and 3.3 show the papers in high impact journals.

TABLE 3.2: PAPERS IN HIGH IMPACT JOURNALS 2022-2023 (JCR>10)

Paper number	Journal	JCR
[96]	GUT	31,793
[29,218]	Nature Communications	17,694
[232]	Information Fusion	17,564
[38]	IEEE SIGNAL PROCESSING MAGAZINE	15,204
[196]	IEEE Transactions on Neural Networks and Learning Systems	14,255
[161]	Earth System Science Data	11,815
[260,153]	IEEE Transactions on Systems Man Cybernetics-Systems	11,471

TABLE 3.3: PAPERS IN HIGH IMPACT JOURNALS 2022-2023 (JCR>5)

Paper number	Journal	JCR
[264,315,319,321]	Chaos, Solitons & Fractals	9,922
[151,258]	Physics of Life Reviews	9,685
[201]	Neural Networks	79,657
[85]	IEEE Transactions on Intelligent Transportation Systems	9,551
[195]	Acta Materialia	9,209
[281]	Journal of Environmental Management	8,910
[23,51,111,280,287]	Expert Systems with Applications	8,665
[36,268]	Scientific Data	8,501
[148,190,254,313]	Applied Soft Computing	8,263
[123,129]	Engineering Applications of Artificial Intelligence	7,802
[318]	International Soil and Water Conservation Research	7,481
[64]	IEEE Transactions on Power Systems	7,326
[46,159,160,227]	IEEE Transactions on Information Forensics and Security	7,231
[246]	Computers & Industrial Engineering	7,180
[221]	Computer Methods and Programs in Biomedicine	7,027
[131,164]	Journal of Hydrology	6,708
[200,306]	Computers in Biology and Medicine	6,698
[262]	HYDROLOGY AND EARTH SYSTEM SCIENCES DISCUSSIONS (ONLINE)	6,617
[83]	Computer Methods in Applied Mechanics and Engineering	6,588
[95,194]	IEEE Transactions on Automatic Control	6,549
[5,311]	European Journal of Operational Research	6,363
[175]	JMIR Mental Health	6,332
[35]	Water Resources Research	6,159
[302]	Oral Oncology	5,972
[62,231]	Neurocomputing	5,779
[117]	Atmospheric Environment	5,755
[167]	Nonlinear Dynamics	5,741
[3]	Internet of Things	5,711
[94]	Tribology International	5,620
[245]	Data Mining and Knowledge Discovery	5,406
[263]	American Journal of Epidemiology	5,363
[13,189,216]	Remote Sensing	5,349
[266]	IEEE Geoscience and Remote Sensing Letters	5,343
[134]	Applied Mathematical Modelling	5,336
[314]	IEEE Transactions on Instrumentation and Measurement	5,332
[316]	Epidemics	5,324
[251,323]	IEEE Transactions on Visualization and Computer Graphics	5,226
[211]	Environmental Science and Pollution Research	5,190
[198,257,277]	Computers & Operations Research	5,159
[247]	Frontiers in Neuroscience	5,152
[304]	Measurement	5,131
[144]	Neural Computing and Applications	5,102
[44,80]	Bioengineering	5,046

3.2.3   RECONSTRUCTION OF COMPLEX NETWORKS

Coordinator: Tiago Pereira da Silva (USP-ICMC)

This project aims at describing emergent behaviors in complex networks of nonlinear dynamic systems such as the brain, power networks, epidemics, social networks, protein networks, and smart city sensors. The goal is to predict critical transitions and to prevent catastrophes.

This project has had a great impact, and it has been supported by Serrapilheira Institute and The British Royal Society. The results of this project has been published on the Reviews of Modern Physics [323], a high impact journal.

This project was one of the 12 projects that were selected to receive an additional R$1.000.000 from Serrapilheira Institute

Funding: R$:1.100.000,00 (Serrapilheira) and R$:400.000,00 (The Royal Society)

3.2.4   METHODOLOGIES AND RELIABILITY METRICS OF WELL-DRILLING EQUIP-MENT

Coordinator: Francisco Louzada Neto (ICMC-USP)

The objective of this project is to develop statistical and computational methodologies, appropriate for the calculation of the reliability of various equipment used for the drilling wells, taking into consideration the provisions of the same throughout the system and their failure rates.

Institutional/Industrial Partnerships: ICMC-USP, Petrobras S.A.
Funding: R$:4.722.991,00

3.2.5   EVA - VIRTUAL ASSISTANT FOR PREGNANT WOMEN: FOLLOW-UP OF PHYS-ICAL ACTIVITY

Coordinator: Gleici da Silva Castro Perdoná (FMRP-USP)

EVA is the world's first open source, Portuguese-speaking virtual personal assistant. Virtual assistants (AV) are software or a set of software capable of interacting with humans in natural language, such as writing and reading chats or speaking, listening and interpreting voice commands. Personal virtual assistants, on the other hand, are a category capable of adapting to a specific person, meeting their personal needs; the goal is - in the near future - to be something like a virtual friend with a unique personality, who has, for example, a tone of voice and behavior of his own.

EVA is an acronym for Virtual Analytical Assistant. The term Analytical because it is an auxiliary AV for data processing and statistical inferences based on Artificial Intelligence techniques and Mathematical Models.

The collected data will be obtained from around 200 volunteer pregnant women. The data will be generated by triaxial accelerometer sensors.

At the end of the project, the EVA and auxiliary software will be made available in open code (mostly) to researchers and enthusiasts, just mentioning the source in their respective projects.

Project website: `http://eva.fmrp.usp.br`

Institutional/Industrial Partnerships: PPSUS - FAPESP
Funding: R$:157.641,40

3.2.6 THEMATIC PROJECT 'COMPUTATIONAL METHODS OF OPTIMIZATION' (FAPESP 2018/24293-0)

Coordinator: Sandra A. Santos (IMECC-UNICAMP)

Among the main accomplishments of the period, we highlight: advances in complexity analysis of algorithms for structured nonlinear programming problems; development of constraint qualifications and optimality conditions for cone programming and related problems; development of sequential optimality conditions for nonsmooth optimization and mathematical programs with equilibrium constraints; analysis of higher-order regularization models; solution of noisy problem of parameter identification; theoretical discussion on electricity prices.

3.2.7 AGREEMENT FOR RESEARCH DEVELOPMENT

Coordinator: André Carlos Ponce de Leon Ferreira de Carvalho (ICMC-USP)

Institutional/Industrial Partnerships: Tribunal de Justiça do Estado de São Paulo-TJSP
Funding: R$:1.241.700,48

3.2.8 CRIME PATTERN IDENTIFICATION IN THE 99 RIDE-HAILING SERVICE

Coordinator: Luis Gustavo Nonato (ICMC-USP)

This research project aims to develop exploratory data analysis tools aimed at studying the relationship between crime rates in the ride-hailing service and external variables such as urban characteristics, passengers and drivers data, and socio-economic indicators, seeking mainly to create risk indicators for 99 drivers. In addition to the exploratory analysis, the proposal includes a study of risk prediction techniques for drivers. The analytical tools are based on data science, visual analytics and artificial intelligence methods.

Institutional/Industrial Partnerships: 99
Funding: R$:155.970,00

3.2.9 DEVELOPMENT OF DATA SCIENCE TECHNIQUES IN DCS

Coordinator: Luis Gustavo Nonato (ICMC-USP)

This research project aims to develop exploratory data analysis tools related to investigate Petrobras pipelines' clandestine derivations. The main focus of the research is to use data science and artificial intelligence tools to extract and analyze patterns that allow us to understand how urban, socio-economic, road network, crime dynamics, among other variables, are related to clandestine derivations. In particular, the project seeks to provide subsidies for the future development of indicators that make it possible to identify places at greater risk of suffering a clandestine shunt.

Institutional/Industrial Partnerships: Petrobras Transportes (Transpetro)
Funding: R$:527.400,00

3.2.10 OTIMIZAÇÃO DE PREÇO DE PRODUTOS E EQUALIZAÇÃO DE CONCORRÊN-CIA

Coordinator: Francisco Louzada Neto (ICMC-USP)

Institutional/Industrial Partnerships: Porto Seguro - Seguros
Funding: R$:216.313,00

4. Innovation and Technology Transfer Report

4.1 INTRODUCTION

During its tenth year of activities, the CEPID-CeMEAI´s research team have strived continuously to maintain research and development of new and innovative methodologies up and running. Those technologies are based on mathematical sciences and aim to optimize designs and processes to reduce costs, focusing on the transference of mathematical technology to industry.

All the groups engaged in the CEPID-CeMEAI contributed to the technology transfer process. Although some groups used more specific approach models, generally, the focus was on thinking about practical problems and products, motivated by industrial/institutional projects or community needs, developing essential aspects of the projects in the academic environment, and training human resources, composed mainly by post-docs, PhDs, Masters and IC students, to the best possible level.

From the industrial/institutional/community side, the partnership was generally informally driven by one or a group of industrial/institutional staff responsible for the research, with which the academic team of the project maintains exchanges and collaboration, or by the community, that then absorbed the new technologies via software and systems.

4.2 CEMEAI´S ACTIVITIES

Several actions related to innovation and technology transfer were carried out. The highlights are as follows.

4.2.1 KNOWLEDGE TRANSFER WORKSHOPS

During the last period, CeMEAI promoted the following workshops:

- 2023-01-14, 2023-03-18. 3rd MBA on Data Science Workshop, which occurred remotely. There were presentations of 170 works distributed on virtual rooms.
  More information can be found at
  `https://cemeai.icmc.usp.br/evento/3o-workshop-de-defesas-mba-ciencias-de-dados-cemeai-icmc-usp;`

- 2023-01-30 to 2023-02-03. VII Applied Mathematics School. There were 150 students participating.

More information can be found at

`https://cemeai.icmc.usp.br/abertas-as-inscricoes-para-cursos-da-escola-de-matematica-aplicada/;`

- 2023-02-06 to 2023-02-10. IX Study Group with Industry. There were six problems from two different companies: Tecumseh (manufactoring) and and CCEE/CEPEL (Energy).
  More information can be found at `https://cemeai.icmc.usp.br/WSMPI/9a-edicao/;`

- Complex Flows Applied to Industry Workshop. There were 60 participants and presentations from Embraer, Petrobras, Wikki Brasil, several universities.
  More information can be found at `https://cemeai.icmc.usp.br/evento/workshop-escoamentos-complexos-apl`

- The 10th Study Group with Industry will be promoted by CeMEAI in February 2024.

4.2.2 MEETINGS WITH PARTNERS

One of the main actions of CeMEAI is to search for industrial problems, opportunities and partnerships, providing advice to researchers, students and industries. In the present context, we have the Technological Clinics, a consultancy service for researchers, students and industries needing mathematical, statistical and computing solutions. We set up a team of research and staff of the CEPID-CeMEAI to listen and understand the problems and direct them to one of the CEPID-CeMEAI research groups so that solutions can be delivered quickly and effectively.

During the period of this report, we had 48 meeting with industrial partners. Some of the companies that we met up are: Serasa, Mogai, Encora, Amadeus, SEFAZ-SP, Red D´Or, Tecumseh, Gas Brasiliano, Instituo Jo Clemente, Prefeitura de Lençóis Paulista, Porto Seguro Auto, TCE-SP, SAAE São Carlos, Fujistu, MinSaint (Indra), Claro-Embratel, Havan, Neural Tec, VDIand ITI .

4.2.3 CORPORATE EDUCATION AS AN TECHNOLOGY TRANSFER ACTIVITY

CeMEAI's objective is to promote closer ties between the academic and industrial communities, ensuring that academic, scientific and technological development is accessible to a broader range of users, enabling the development of new materials, processes, products and services through efficient use of mathematical sciences in real problems of the most diverse areas of knowledge.

In this context, we created a quality CeMEAI Corporate Education structure through which we can proceed with our technology transfer process in a structured and systemic manner, guaranteeing a vigorous learning process.

It is important to note that this technology transfer activity is integrated with the education and knowledge diffusion activities as described in Section 5, offering students a unique and significant opportunity to bring a real problem of their companies to be solved with the support of the CEPID-CeMEAI supervisors throughout the course.

Thus, in addition to training and developing theoretical and practical skills in data science, the student can also offer a solution to an industrial problem from his company.

Our courses are offered in different modalities, aligned with the practices and values of our partner companies' vision and mission, reflecting the compelling attendance of their needs.

We have the following training possibilities:

- Professional Master Program in Mathematics, Statistics and Computing Applied to Industry(MECAI);

- MBA on Data Science (online), 1st, 2nd 3rd and 4th Editions;

- MBA on Data Security (online), 1st Edition;

- *In loco* and online Corporate Training Program;

- Specific short training.

We have trained staff from more than 400 companies and institutions, corresponding the following amount of staff from industries:

- 142 staff from the 1st Edition of the MBA in Data Science;

- 55 staff from the 1st Edition of the MBA in Data Security;

- 196 staff from the 2nd Edition of the MBA in Data Science;

- 165 staff from the 3rd Edition of the MBA in Data Science;

- 270 staff from the 4th Edition of the MBA in Data Science;

- 180 staff from the Statistics for Data Science;

- 19 staff from the Corporate Training Program in Data Science for the Sul America Insurance Company;

More information can be found at `http://cemeai.icmc.usp.br/acoes/educacao-corporativa`.

4.2.4 HYBRID PBL AS AN TECHNOLOGY TRANSFER ACTIVITY

The Problem-Based Learning (PBL) methodology aims to increase knowledge's practicality, retention and applicability. PBL has proved to be an excellent alternative to the traditional teaching methodology, with high levels of student satisfaction. Researchers at CEPID-CeMEAI have obtained favourable results regarding implementing this methodology, adapted to statistical disciplines, both at undergraduate and graduate levels. In particular, we proceed with an adapted hybrid structure in which students concomitantly receive training on the course topics but focus on solving real industrial problems on a vertical learning structure, which we named hybrid Problem-Based Learning (hiPBL).

More information can be found at `http://cemeai.icmc.usp.br/acoes/educacao-e-difusao/item/941 -aprendizado-baseado-em-problema-industrial-hibrido-hipbl`.

4.2.5 NEW CONTRACTS

- Tribunal de Justiça do Estado de São Paulo TJSP. Coordinator: André Ponce Leon de Carvalho.

- TCESP. Coordinator: José Alberto Cuminato.

- VolksWagen. Coordinator: André Ponce Leon de Carvalho.

- Neural Tecnologia Ltda. Coordinator: André Ponce Leon de Carvalho.

4.3 NEW INITIATIVES

As future initiatives, the strategy for innovation and technology transfer of the CEPID-CeMEAI should follow some basic lines of action to approximate the academy and industry. Particularly following the three initiatives below:

- Continue to encourage the Knowledge Transfer Workshops (KTW) and Study Groups with Industry (SGI);

- Continue to establish formal cooperation agreements and encourage applications for funding;

- Continue to incentivise the nucleation of start-ups/spin-off companies and the development of new products.

5. Education and Knowledge Diffusion Report

5.1 INTRODUCTION

The activities of Education and Knowledge Diffusion of CeMEAI focuses on the presentation of mathematical contents to students with different levels of knowledge, by organizing lectures and workshops for students visiting the university and visits to public schools. We believe that these activities contribute to a better dissemination of Mathematics both in itself but also in its interactions with the different areas of knowledge. In addition, the center´s publications on the web, make it more visible to society the research activities carried out in universities. More information about the center and its projects can be found at `www.cemeai.icmc.usp.br`.

5.2 ONGOING PROJECTS

5.2.1 MECAI

The Professional Master Program in Mathematics, Statistics and Computing Applied to Industry (MECAI) is a two-years-of-study course started in August 2014. It represents one of the main initiatives of the RIDC-CeMEAI for improving the mathematical sciences background of employees of high-tech selected industries. MECAI is a modular M. Sc. course that can be tailored to meet a given demand. The first module in Finances was targeted at the banking industry and started with 20 students, all employees of banks or brokers. In 2023 the 9th module on Data Science started with new 20 students.

The professional master's degree is the first professional master's degree in Brazil that covers, in a comprehensive way, specific areas of mathematics, statistics and computing applied to industry. The goal is to improve the training of professionals and meet the demand of industry for personnel with a better background in the mathematical sciences. It is a very successfully program, with students of different backgrounds from companies like: Bank of America, Itaú, Morgan Stanley, Bradesco, Siemens, SAP, Nielsen, Cielo, Monsanto, TAM, Embrapa, HP, Serasa Experian, Embraer and others. More information about the Professional Master Program is available at `https://www.icmc.usp.br/pos-graduacao/mecai`.

On september 19-23 2022, we promoted the 2nd MECAI Workshop. All the presentations are public at `https://cemeai.icmc.usp.br/WMECAI/trabalhos-2wmecai/`

5.2.2   MBA IN DATA SCIENCE

The 440-hour online graduate course, the MBA in Data Science is on its third edition with less than 10% of dropouts and maintaining a high Net Promoter Score of 40 (ranking Great). The 5th edition is planned to 2024.

More information can be found at `www.cemeai.icmc.usp.br/MBA`.

5.2.3   MBA IN DATA SECURITY

Following the success of the MBA in Data Science, CeMEAI created another 400-hour online graduate course, the MBA in Data Security that started in June 2021. It has 55 students. More information can be found at `www.cemeai.icmc.usp.br/MBASD`.

5.2.4   EDUSCAR

By the end of 2018 the five RIDCs based in São Carlos together with the Engineering Research Center met at UFSCar, with the objective of improving education in São Carlos, using some schools as a test bed. The São Carlos' Education secretary and State Education Director were invited to this work-group, and we are working together since then. Several existing and new initiatives were proposed and are being carried out for the benefit of local public education. EduSCar activities are described on a separated report. Some of the results of the initiatives can be found in the Eduscar website `http://www.cemeai.icmc.usp.br/EduSCar/`
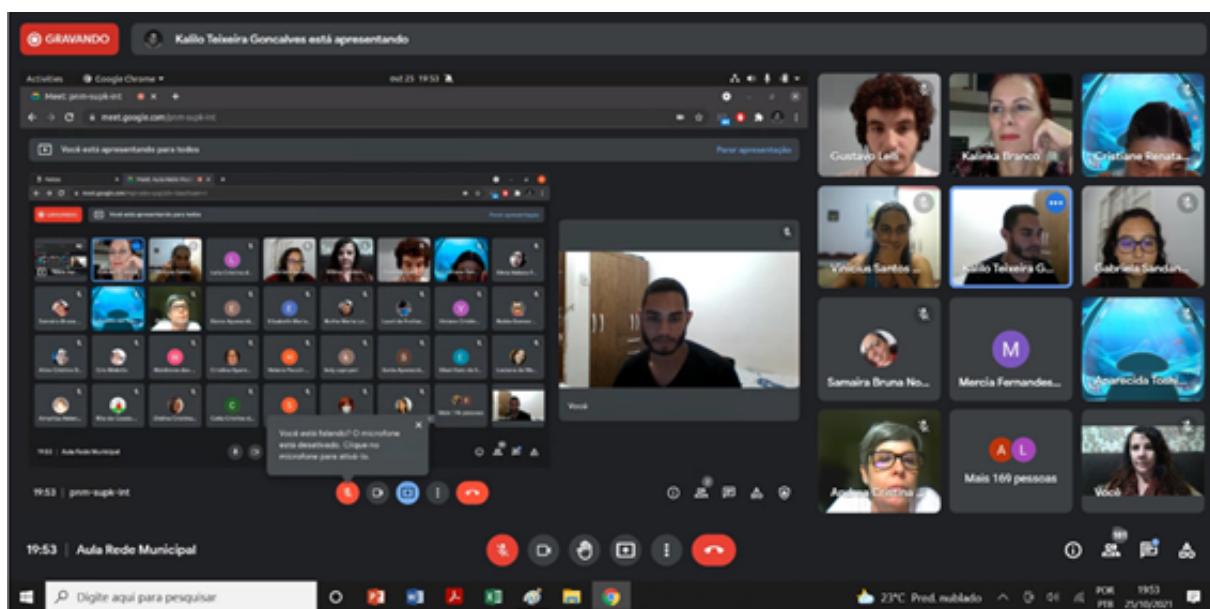
FIGURE 5.1: PROJECT - EDUSCAR

5.3   DISSEMINATION

During the period of this report 47 videos were produced and published with more than 5061 views. Our YouTube Channel grew from 1250 to 1500 subscriptions with more than 192,000 views (70,000 new views

last 12 months). The website had more than 2,000 users per month in last months. There were 48 press releases in the period with a total of more than 31,000 hits on the website.

The Instagram page was created on august 2022 and there were more than 460 followers em 130 posts.

CeMEAI clipping includes more than 389 appearances in media in this report period including:

- TV Channels: Rede Globo and local affiliates, CNN, Rede Record TV Cultura and SBT

- Newspapers: O Estado de São Paulo, Folha de São Paulo, O Globo and Correio Braziliense.

- Magazines and sites: UOL, Terra, G1, R7, Valor Econômico, CBN, Veja, Agência FAPESP and Revista Pesquisa Fapesp.

5.3.1   WEBSITE AND SOCIAL MEDIA

- **Website:** `http://www.cemeai.icmc.usp.br`

- **Facebook:** `https://www.facebook.com/cepid.cemeai`

- **YouTube:** `https://www.youtube.com/cepidcemeai`

- **Twitter:** `https://twitter.com/cepidcemeai`

- **Instagram:** `https://www.instagram.com/cepidcemeai/`

6. Institutional Support to the Project

The University of São Paulo through the Institute of Mathematical and Computer Sciences (ICMC) as the project host Institution has provided adequate support for the smooth running of it. The main support provided by ICMC is:

1. Two full-time staff working as industry liaison, knowledge and dissemination, and full support for visitors, meetings, industry contacts, and contracts

2. Office space for meetings and for the two staff. Computer infrastructure for the installation of the cluster Euler.

3. Vehicles and drivers for all the travel involved in the industrial contacts, workshops, and visitors transfers

4. Full support for accounting and keeping track of expenses and the necessary documentation. Full support for purchasing goods, booking hotels, and arranging and booking travel for all participants of Cepid-CeMEAI, including those from the associate institutions.

5. Full support for the organization of the Study Groups with Industry and Modeling Schools.

6. Full support for industry liaison and contracts conclusion.

7. Activities plan for the next period

As usual, for the next year, we intend to continue to organize the Study Groups with Industry (SGI), now in collaboration with SENAI, and with much hope that this will make it easier to reach more industries. Another possible plan is that we might opt to run several short versions of the workshop each one dedicated to a different market niche. With ten years of the project gone by, it became more realistic the idea of having research projects genuinely sponsored by the Center. CeMEAI sponsored the application of two new projects to Fapesp. One center for AI, was granted to Prof. André Carvalho, and one CPA is under negotiation with Fapesp in addition to also being part of the IBM center C4AI, which was granted to Prof. Fabio Gagliardi Cozman from Poli-USP and has the participation of Alexandre Delben from CeMEAI. We have also applied to the last round of the new EMBRAPII call from MCTI and have been accepted as a full Embrapii Unit from December 2022. In an attempt to become more interdisciplinary, we are contacting other RIDCs aiming to encourage the possibility of having more mathematics in their activities. RIDCs that collaborate intensely with CeMEAI, at present, are CERTEV and NEV. We are also making arrangements for the Euler cluster upgrade in 2024. There is also an initiative from the University administration to institutionalize CeMEAI as part of the University corporation.

Appendices

A. M.Sc. and PhD Students

A.1 ONGOING PHDS

1. Adailton Ferreira de Araújo. Análise de Sentimentos baseada em Aspectos para Revisões de Produtos de Software. Start: 2020. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP. Supervisor: Ricardo Marcondes Marcacini

2. Alan Reis. Análise da interação rio-aquífero, a partir do uso de sensores de temperatura distribuídos. Start: 2018. Thesis (Ph.D. in Hydraulic Engineering) - USP, CAPES. Supervisor: Edson Cezar Wendland

3. Aldimir José Bruzadin. Segmentação Semântica de Imagens via Aprendizado por Reforço Profundo e Minimização de Funcionais de Energia em Grafos. Start: 2022. Thesis (Ph.D. in Mathematics) - UNESP, CAPES. Supervisor: Wallace Correa de Oliveira Casaca

4. Alessandra Campos dos Santos. Aplicação do método Eddy Covariance e implementação de uma abordagem de fusão de imagens de sensoriamento remoto multi-escala para o monitoramento da evapotranspiração em área de Cerrado sensu stricto. Start: 2019. Thesis (Ph.D. in Hydraulic Engineering) - USP, CAPES. Supervisor: Edson Cezar Wendland

5. Alex de la Cruz Huayanay. Modelos alternativos para classificação na presença de dados desequilibrados.. Start: 2019. Thesis (Ph.D. in Statistics) - USP, CAPES. Supervisor: Jorge Luis Bazan Guzman

6. Alex Leal Mota. Não Definido. Start: 2019. Thesis (Ph.D. in Statistics) - USP. Co Supervisor: Francisco Louzada Neto

7. Alfredo Guilherme da Silva Souza. Proteonica aplicada a detecção de Cancer. Start: 2019. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - ICMC - USP, CAPES. Supervisor: Adenilso da Silva Simão

8. Aline Mariane de Faria. Fontes de Financiamento à Inovação em empresas de base tecnológica no Brasil. Start: 2018. Thesis (Ph.D. in Management) USP, CAPES. Supervisor: Moacir de Miranda Oliveira Junior

9. Aline Roberta Santos Righi. Effects of Empirical Correlations for Crossflow Instabilities Applied to Laminar-Turbulent Transition. Start: 2019. Thesis (Ph.D. in Science and Space Technologies) - ITA, FAPESP. Supervisor: Joao Luiz Filgueiras de Azevedo

10. Aline Rodrigues Machado. Não definido. Start: 2021. Thesis (Ph.D. in Statistics) - USP. Supervisor: Francisco Louzada Neto

11. Alysson Alexander Naves Silva. Classificação de sementes e grãos com comitê de Redes Neurais Convolucionais Evolutivas usando Algoritmos Genéticos Multiobjetivo. Start: 2019. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP. Supervisor: Claudio Fabiano Motta Toledo

12. Alysson Matos de Souza. Álgebra Geométrica em Dinâmica Molecular. Start: 2023. Thesis (Ph.D. in Applied Mathematics) - UNICAMP, CAPES. Supervisor: Carlile Campos Lavor

13. Ana Raquel Faccioli. Otimização em sistemas de abastecimento de água. Start: 03/2022. Start: 2022. Thesis (Ph.D. in Eletrical Engineering) - UNESP, CAPES. Supervisor: Edilaine Martins Soler

14. Anderson Paulo Avila Santos. HostAssociatedMetagenomeDB: a public repository of curated and standardized metadata of non-human host-associated metagenomes. Start: 2021. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP. Supervisor: André Carlos Ponce de Leon Ferreira de Carvalho

15. André Emílio Toscano. Planejamento da Operação Energética do SIN Usando Modelo de Controle Preditivo. Start: 2016. Thesis (Ph.D. in Eletrical Engineering) - UNICAMP. Supervisor: Secundino Soares Filho

16. André Luiz Ortiz da Silva. Inpainting Digital via Técnicas de Deep Learning e Métodos de Suavização Seletiva. Start: 2021. Thesis (Ph.D. in Mathematics) - UNESP. Supervisor: Wallace Correa de Oliveira Casaca

17. André Simões Ballarin. Eventos extremos em um contexto de mudanças climáticas: caracterização baseada em modelos climáticos e não estacionariedade. Start: 2021. Thesis (Ph.D. in Hydraulic Engineering) - USP, FAPESP. Supervisor: Edson Cezar Wendland

18. Andrew Gomes Pereira Sarmento. AI-assisted human-machine interface for remotely piloted aircraft system. Start: 2022. Thesis (Ph.D. in Aeronautical and Mechanical Engineering) - ITA. Supervisor: Roberto Gil Annes da Silva

19. Andreza Beatriz Jacinto da Silva. Estudo da estabilidade de fluido não Newtoniano modelado pelo PTT. Start: 2022. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP. Supervisor: Leandro Franco de Souza

20. Angelo Cesar Mendes da Silva. Aprendizado de Representação Multimodal para Tarefas de Aprendizado de Máquina com Dados Musicais. Start: 2020. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP. Supervisor: Ricardo Marcondes Marcacini

21. Angelo Garangau Menezes. Meta-learning applied to Continual Learning. Start: 2020. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP, CAPES. Supervisor: André Carlos Ponce de Leon Ferreira de Carvalho

22. Anna Caroline Felix Santos de Jesus. Estudo numérico sobre o impacto da topografia na camada-limite atmosférica da floresta Amazônica com a metodologia RaNS. Start: 2021. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP. Supervisor: Livia Souza Freire Grion

23. Antonio Marcos Almeida Ferreira. Otimização Multi-Objetivo Aplicada em Névoa para o Provisionamento Dinâmico de Recursos no Contexto de Internet das Coisas. Start: 2018. Thesis Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - ICMC - USP. Supervisor: Júlio Cézar Estrella

24. Arianne Alves da Silva. Soluções Exatas e Heurísticas para Problemas de Estoque e Roteamento (Co-Supervisor Reinaldo Morabito DEP/UFSCar). Start: 2018. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP. Supervisor: Maristela Oliveira dos Santos

25. Arthur Medeiros Figueiredo Barreto. Modelo matemático multiperíodo para o planejamento e controle da produção de biodigestores. Start: 2020. Thesis (Ph.D. in Production Engineering) - UNESP, CAPES. Co Supervisor: Helenice de Oliveira Florentino Silva

26. Aruane Mello Pineda. Modelagem de dinâmicas sociais interagentes em redes complexas. Start: 2019. Thesis (Ph.D. in Computer Sciences and Computational Mathematics (ICMC)) - USP, FAPESP. Supervisor: Francisco Aparecido Rodrigues

27. Asrat Mekonnen. Epidemic Spreading with City mobility. Start: 2019. Thesis (Ph.D. in Applied Mathematics) - USP, CAPES. Supervisor: Tiago Pereira da Silva

28. Batista S. Gigliotti. Gestão da Transferência de Conhecimento em Franquias Brasileiras. Start: 2018. Thesis (Ph.D. in Management) USP. Supervisor: Moacir de Miranda Oliveira Junior

29. Beatriz Liara Carreira. Análise da estabilidade hidrodinâmica de escoamentos viscoelásticos em camada limite. Start: 2021. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP, CNPq. Supervisor: Leandro Franco de Souza

30. Beatriz Regina Brum. Métodos de inferência em sistemas complexos. Start: 2021. Thesis (Ph.D. in Statistics) - USP. Supervisor: Francisco Aparecido Rodrigues

31. Brenno de Mello Alencar. Metodo De Concept Drift Contextual Para Aprendizado Online Em Redes Neurais Aplicadas Em Data Stream. Start: 2020. Thesis (Ph.D. in Computer Science) - Universidade Federal da Bahia. Supervisor: Ricardo Araújo Rios

32. Breno Caetano da Silva. Medidas de distância baseadas em entropia e alinhamento de séries temporais para mineração de dados baseada em filogenias. Start: 2015. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP. Supervisor: Alexandre Cláudio Botazzo Delbem

33. Brucce Neves dos Santos. Mineração de Opiniões com Fusão de Informação em Redes Heterogêneas. Start: 2019. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP, CNPq. Co Supervisor: Ricardo Marcondes Marcacini

34. Bruna Cristina Braga. Aprendizado por representação em metaheurísticas para abordar o problema de graph drawing. Start: 2020. Thesis (Ph.D. in Operations Research) - UNIFESP, CAPES. Supervisor: Mariá Cristina Vasconcelos Nascimento Rosset

35. Bruno Belorte. Ciência de Dados na Segurança Pública: Uma Abordagem Inteligente guiada por IA. Start: 2021. Thesis (Ph.D. in Mathematics) - UNESP, CAPES. Supervisor: Wallace Correa de Oliveira Casaca

36. Bruno Goffert. Estudos Aerodinâmicos de Asa com Controle Ativo de Escoamento. Start: 2019. Thesis (Ph.D. in Science and Space Technologies) - ITA, CAPES. Supervisor: MARIA LUÍSA COLLUCCI DA COSTA REIS

37. Caio Flávio Martinez Fontoura Junior. Análise e Validação Quantitativa de Técnicas de Inpainting Aplicadas no Contexto de Sensoriamento Remoto. Start: 2021. Thesis (Ph.D.) - UNESP, CAPES. Co Supervisor: Wallace Correa de Oliveira Casaca

38. Caio Matheus Prates Batalha Faria. a ser definido. Start: 2018. Thesis (Ph.D. in Biochemistry) - USP, CAPES. Co Supervisor: André Fujita

39. Caio Paziani Tomazella. Solução de problemas integrados de aquisição de matéria-prima e dimensionamento de lotes com o auxílio de ferramentas de Big Data Analytics. Start: 2019. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP. Supervisor: Maristela Oliveira dos Santos

40. Camila Xavier Sá Peixoto Pinheiro. Multivariate graded response models for large-scale polytomous items data. Start: 2020. Thesis (Ph.D. in Statistics) - USP. Supervisor: Cibele Maria Russo Novelli

41. Camilo Restrepo Estrada. Sistemas de alerta antecipado de cheias com base em sistemas geográficos voluntários. Start: 2014. Thesis (Ph.D. in Hydraulic) - USP, CNPq. Supervisor: Eduardo Mario Mendiondo

42. Camyla Ferreira Moreno. Novas formulações para o problema de designação de locais de armazenagem. Start: 2021. Thesis (Ph.D. in Operations Research e Transporte Aereo) - ITA, CAPES. Supervisor: Mariá Cristina Vasconcelos Nascimento Rosset

43. Carla Micheli da Silva. Padrão de Atividade Física em Gestantes Usuárias do Sistema Único de Saúde da Cidade de Ribeirão Preto. Start: 2019. Thesis (Ph.D. in Health) - Faculdade de Medicina de Ribeirão Preto. Supervisor: Gleici da Silva Castro Perdoná

44. Carlos Eduardo de Morais Ferreira. Modelos e Métodos de solução para problemas dee dimensionamento de lotes com múltiplas plantas. Start: 2020. Thesis (Ph.D. in Operations Research) - UNIFESP, CAPES. Co Supervisor: Mariá Cristina Vasconcelos Nascimento Rosset

45. Carlos Franklin Taco Pedraza. Modelos espaciais lineares gaussianos assimétricos com repetição múltiplas. Start: 2020. Thesis (Ph.D. in Statistics) USP. Supervisor: Vicente Garibay Cancho

46. Carlos Mauricio Ruiz Diaz. Modelagem heurística híbrida para detecção de anomalias em escoamento bifásico líquido/gás-denso. Start: 2021. Thesis (Ph.D. in Mechanical Engineering) - USP - Escola de Engenharia de São Carlos, CNPq. Supervisor: Oscar Mauricio Hernandez Rodriguez

47. Cassiano da Silva Tavares. Modelos e Métodos de Otimização para Apoio à Tomada de Decisão no Plantio Agrícola em Citricultura. Start: 2021. Thesis (Ph.D. in Production Engineering) - UFSCar. Supervisor: Pedro Augusto Munari Junior

48. christian salaro bresci. surface cavity effect on the evolution of a Tollmien-Schlichting wave. Start: 2019. Thesis (Ph.D. in Mechanical Engineering) - USP, CAPES. Supervisor: Marcello Augusto Faraco de Medeiros

49. Clarissa Câmara de Freitas. Ferramentas de Suporte a Decisao para Seguranca Hidrica Multisetorial sob Condicoes de Não-Estacionariedade. Start: 2015. Thesis (Ph.D. in Hydraulic) - USP, CAPES. Supervisor: Eduardo Mario Mendiondo

50. Claudia Evelyn Escobar Montecino. Using VAE for Incomplete Educational Data. Start: 2017. Thesis (Ph.D. in Statistics) - ICMC - USP (USP, São Carlos), CAPES. Supervisor: Mariana Cúri

51. Claudio Fogaça Truyts. Metodologia para avaliação da incerteza de medição dinâmica em ensaios de verificação de funcionamento de anemômetros. Start: 2019. Thesis (Ph.D. in Science and Space Technologies) - ITA. Supervisor: MARIA LUÍSA COLLUCCI DA COSTA REIS

52. Daniel Camilo F. Guzman. Não Definido. Start: 2019. Thesis (Ph.D. in Statistics) - USP. Supervisor: Francisco Louzada Neto

53. Daniel Cunha Oliveira. a ser definido. Start: 2021. Thesis (Ph.D. in Computer Science) - USP. Supervisor: André Fujita

54. Daniel Felipe da Silva Santos. Rastreamento de Pessoas em Vídeo Utilizando Aprendizado em Profundidade. Start: 2019. Thesis (Ph.D. in Computer Science) - UNESP, Petrobras. Supervisor: João Paulo Papa

55. Daniel Fernando Garcia. Modelos matemáticos e métodos de solução para otimização da cogeração de energia em usinas sucroenergéticas.Start: 03/2022. Start: 2022. Thesis (Ph.D. in Eletrical Engineering) - UNESP, CAPES. Supervisor: Edilaine Martins Soler

56. Daniel Morales. Line integral on discrete grids and applications. Start: 2020. Thesis (Ph.D. in Statistics) - USP. Supervisor: Nikolai Valtchev Kolev

57. Danilo Adrian Marques. Características robustas de superfícies lineares por partes. Start: 2021. Thesis (Ph.D. in Ciências de Computação e Matemática Computacional) - ICMC - USP. Co Supervisor: Antonio Castelo Filho

58. Denilson Stefanelli. Inversão de Dados de Ressonância. Start: 2018. Thesis (Ph.D. in Oil Engineering) - UNICAMP. Supervisor: Lucio Tunes dos Santos

59. Diaulas Murize Santana Vieira Marcondes. Métodos de otimização para big data e problemas de grande porte com restrições. Start: 2020. Thesis (Ph.D. in Applied Mathematics) - USP, CAPES. Supervisor: Ernesto Julián Goldberg Birgin

60. Diego Alejandro Guzmán Arias. Integração de Estratégias de Adaptação a Riscos Hidrológicos Visando Sistemas de Suporte à Decisão em Bacias Hidrográficas com Dados Escassos. Start: 2014. Thesis (Ph.D. in Hydraulic) - USP. Supervisor: Eduardo Mario Mendiondo

61. Diego Ferolla de Abreu. Simulação de Grandes Escalas para Representar a Saída de Jatos Turbulentos a Altos Números de Reynolds. Start: 2019. Thesis (Ph.D. in Science and Space Technologies) - ITA. Supervisor: Joao Luiz Filgueiras de Azevedo

62. Diego Frazatto Pedroso. Estratégias para otimzação de recursos computacionais em nuvens públicas e privadas. Start: 2019. Thesis Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - ICMC - USP. Supervisor: Júlio Cézar Estrella

63. Diego Minatel. Aprendizado de Máquina não-discriminatório por meio de Funcionamento Diferencial dos Itens. Start: 2020. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - ICMC - USP (USP, São Carlos). Co Supervisor: Mariana Cúri

64. Dimaghi Schwamback. Dinâmica da infiltração e escoamento superficial em vertentes com diferentes usos do solo e mudanças climáticas em área de Cerrado. Start: 2020. Thesis (Ph.D. in Hydraulic Engineering) - USP, CAPES. Supervisor: Edson Cezar Wendland

65. Diogo Apóstolo. Imbalanced and Missing Data Problems: studying their individuality and their interplay. Start: 2023. Thesis (Ph.D. in Engineering) - Universidade de Coimbra. Co Supervisor: Ana Carolina Lorena

66. Douglas Dias Lieira. a definir. Start: 2022. Thesis (Ph.D. in Computer Science) - UNESP. Supervisor: Rodolfo Ipolito Meneguette

67. Éder Silva de Brito. Intensity Proportional Repair Alert Model systems under dependent competing risks. Start: 2019. Thesis (Ph.D. in Statistics) - USP. Co Supervisor: Paulo Henrique Ferreira da Silva

68. Edesio Pinto de Souza Alcobaça Neto. Automated Machine Learning: Learning to Learn. Start: 2018. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP, CAPES. Supervisor: André Carlos Ponce de Leon Ferreira de Carvalho

69. Edmilson Roque. Reconstruction of Networks from Data. Start: 2018. Thesis (Ph.D. in Mathematics) - USP. Supervisor: Tiago Pereira da Silva

70. Edson Orati da Silva. Estudo do padrão de escoamento anular vertical ascendente e de sua estabilidade hidrodinâmica com misturas de líquido e gás-denso em tubo grande. Start: 2022. Thesis (Ph.D. in Mechanical Engineering) - USP - Escola de Engenharia de São Carlos, Fundação para o Incremento da Pesquisa e Aperfeiçoamento Industrial. Supervisor: Oscar Mauricio Hernandez Rodriguez

71. Eduardo dos Santos Teixeira. Problemas de roteamento de veículos com prioridades. Start: 2019. Thesis (Ph.D. in Mathematics) - UNESP, CAPES. Supervisor: Silvio Alexandre de Araujo

72. Eduardo Lira. A ser definido. Start: 2017. Thesis (Ph.D. in Computer Science) - USP, CAPES. Supervisor: André Fujita

73. Eduardo Vargas Ferreira. A definir. Start: 2022. Thesis (Ph.D. in Operations Research) - UNIFESP. Supervisor: Ana Carolina Lorena

74. Elian Laura Riveros. Open-world Recognition. Start: 2021. Thesis (Ph.D. in Computer Science) - IC - UNICAMP, Governo do Peru. Supervisor: Anderson de Rezende Rocha

75. Elidiane Pereira dos Santos. Uma análise de algoritmos para detecção de osbtáculos dinâmicos em apoio a portadores de deficência visual. Start: 2017. Thesis (Ph.D. in Computer Science) - Universidade Federal da Bahia. Supervisor: Tatiane Nogueira Rios

76. Eliézer Passos Moura. Mapeamento dos Rios da Amazônia Usando Veículos Autônomos Subaquáticos. Start: 2020. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP. Supervisor: Jó Ueyama

77. Émerson Dutra. Geometria de Distâncias na Esfera. Start: 2022. Thesis (Ph.D. in Applied Mathematics) - UNICAMP. Supervisor: Carlile Campos Lavor

78. Emerson Yoshiaki Okano. Identificação de anomalias na necessidade de uso de recursos hospitalares. Start: 2020. Thesis (Ph.D. in Operations Research) - UNIFESP, CAPES. Supervisor: Mariá Cristina Vasconcelos Nascimento Rosset

79. Érick Rúbens Oliveira Cobalchini. Identificação de áreas de recarga e descarga do Sistema Aquífero Guarani com o auxílio de sensoriamento remoto e traçador térmico. Start: 2019. Thesis (Ph.D. in Hydraulic Engineering) - USP, CAPES. Supervisor: Edson Cezar Wendland

80. Erik Junior Paulino. Otimização do processo logístico da geração de biogás. Start: 08/2021. Start: 2021. Thesis (Ph.D. in Production Engineering) - UNESP, CAPES. Co Supervisor: Edilaine Martins Soler

81. Esteban Wilfredo Vilca Zuñiga. Análise de séries temporais utilizando redes complexas. Start: 2021. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP. Supervisor: Zhao Liang

82. Evandro Ortigosa. Explainable Machine Learning. Start: 2020. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - ICMC - USP. Supervisor: Luis Gustavo Nonato

83. Ever Santoro. Logística de distribuição em uma fábrica de sorvetes. Start: 2018. Thesis (Ph.D. in Production Engineering) - UNESP. Supervisor: Edilaine Martins Soler

84. Fabiano Berardo de Sousa. Reconhecimento de melodias a partir de trecho melódico distorcido. Start: 2023. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP, CAPES. Supervisor: Zhao Liang

85. Fabiano Rodrigues Coelho. Diagnóstico e seleção de variáveis em modelos de regressão b. Start: 2018. Thesis (Ph.D. in Statistics) - USP, CAPES. Supervisor: Cibele Maria Russo Novelli

86. Fabiano Rodrigues Coelho. Diagnóstico e seleção de variáveis em modelos de regressão binária com função de ligação assimétrica. Start: 2018. Thesis (Ph.D. in Statistics) - USP, CAPES. Co Supervisor: Jorge Luis Bazan Guzman

87. Fabiano Ruano Neto. Análise numérica e Implementações Computacionais de Equações Constitutivas de Escoamentos não-Newtonianos. Start: 2021. Thesis (Ph.D. in Computer Sciences and Computational Mathematics - ICMC - USP, FAPESP. Supervisor: Antonio Castelo Filho

88. Fabio Vinícius Goes Amaral. Simulações computacionais e Inteligência Artificial na solução de escoamentos de fluidos não-Newtonianos (2021/07034-4)). Start: 2021. Thesis (Ph.D) - UNESP, FAPESP. Supervisor: Cassio Machiaveli Oishi

89. Felipe Acuña Alegria. Desenvolvimento de modelos de confiabilidade e análise de falhas em sistemas atuantes em poços de petróleo do pré-sal. Start: 2019. Thesis (Ph.D. in Mechanical Engineering) - USP - Escola de Engenharia de São Carlos, Fundação de Apoio à Física e Química. Supervisor: Oscar Mauricio Hernandez Rodriguez

90. FELIPE EDUARDO ATENAS MALDONADO. Proximal decomposition methods for optimization problems with structure. Start: 2023. Thesis (Ph.D. in Applied Mathematics) - UNICAMP, FAPESP. Co Supervisor: Claudia Alejandra Sagastizábal

91. Felipe Eduardo Atenas Maldonado. Variantes contemporâneas de métodos de decomposição para otimização de grande porte. Start: 2020. Thesis (Ph.D. in Applied Mathematics) - UNICAMP, FAPESP. Supervisor: Paulo José da Silva e Silva

92. Felipe Marino Moreno. Physics-Informed Machine Learning Applied to Forecast Metocean Conditions. Start: 2021. Thesis (Ph.D. in Mechanical Engineering) - USP, FAPESP. Co Supervisor: Fabio Gagliardi Cozman

93. felipe oliveira aguirre. Felipe Oliveira Aguirre. Start: 2021. Thesis (Ph.D. in Mechanical Engineering) - USP, Air Force Office of Scientific Research. Supervisor: Marcello Augusto Faraco de Medeiros

94. Felipe Orlandi de Oliveira. Liquid animation. Start: 2022. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP. Supervisor: Adriano Kamimura Suzuki

95. Fernanda Pereira Guidotti. Arquitetura 6C: Uma proposta para IA na Indústria. Start: 2019. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP, Instituto SENAI de Inovação em Sistemas Embarcados. Supervisor: Claudio Fabiano Motta Toledo

96. Fernando Abreu. Aspectos económicos dos impactos de inundações urbanas. Start: 2016. Thesis (Ph.D. in Hydraulic) - USP, CAPES. Supervisor: Eduardo Mario Mendiondo

97. fernando henrique tadashi himeno. effect of roughness on the evolution of a Tollmien-Schlichting wave. Start: 2019. Thesis (Ph.D. in Mechanical Engineering) - USP, FAPESP. Supervisor: Marcello Augusto Faraco de Medeiros

98. Fernando Humberto de Almeida Moraes Neto,. Não Definido. Start: 2020. Thesis (Ph.D. in Statistics) - USP. Supervisor: Francisco Louzada Neto

99. Fernando Humberto de Almeida Moraes Neto. Ensemble de modelos de transferência de aprendizado: Uma nova abordagem para detecção de câncer de mama. Start: 2020. Thesis (Ph.D. in Statistics) - USP - ICMC. Supervisor: Adriano Kamimura Suzuki

100. Fernando Queiroz. Homoclinic Chaos in Networks. Start: 2018. Thesis (Ph.D. in Mathematics) - USP, CAPES. Supervisor: Tiago Pereira da Silva

101. Filipe de Carvalho Nascimento. Liquid animation. Start: 2017. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP, CAPES. Supervisor: Adriano Kamimura Suzuki

102. Filipe Loyola Lopes. Identificação e tratamento de inconsistências em dados médico-hospitalares. Start: 2020. Thesis (Ph.D. in Operations Research) - UNIFESP, CAPES. Supervisor: Ana Carolina Lorena

103. Filomen Incahuanaco Quispe. Liquid animation. Start: 2017. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP. Supervisor: Adriano Kamimura Suzuki

104. Flavia Erika Almeida Gilo Azevedo. Alzheimer's Detection. Start: 2021. Thesis (Ph.D. in Computer Science) - IC - UNICAMP, Santander. Supervisor: Anderson de Rezende Rocha

105. Flávio Pinto De Almeida Filho. Detecção de Comunidades em Redes Complexas para Previsão de Fraudes Financeiras. Start: 2021. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP. Supervisor: Zhao Liang

106. Francis Lorena Larreal Herrera. Restauração inexata com sequências de funções. Start: 2020. Thesis (Ph.D. in Applied Mathematics) - UNICAMP. Co Supervisor: Luis Felipe Cesar da Rocha Bueno

107. Frederico Bolsoni Oliveira. Um Estudo de Limitadores para Formulações de Alta Ordem para Escoamentos Compressíveis. Start: 2021. Thesis (Ph.D. in Science and Space Technologies) - ITA, FAPESP. Supervisor: Joao Luiz Filgueiras de Azevedo

108. Gabriel Capiteli Bertocco. Mining Persons, Objects and Places of Interest. Start: 2019. Thesis (Ph.D. in Computer Science) - IC - UNICAMP, FAPESP. Supervisor: Anderson de Rezende Rocha

109. Gabriel de Freitas Pinheiro. Teoria Espectral de Grafos e Geometria de Distâncias. Start: 2022. Thesis (Ph.D. in Applied Mathematics) - UNICAMP, CNPq. Supervisor: Carlile Campos Lavor

110. Gabriel Yudi Ragni Hamada. TBD. Start: 2022. Thesis (Ph.D. in Ph.D. in Mechanical Engineering) - UNICAMP, FAPESP. Supervisor: William Roberto Wolf

111. Gabriela Faria Barcelos Gibim. Conhecimento especializado e interpretativo de professores que ensinam matemática no contexto da divisão de frações por meio de uma tarefa para formação. Start: 2019. Thesis (Ph.D. in Mathematics) - UNICAMP. Supervisor: Laura Leticia Ramos Rifo

112. Gean Trindade Pereira. Meta-aprendizado aplicado a redes neurais produndas multitarefa. Start: 2019. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP, CNPq. Supervisor: André Carlos Ponce de Leon Ferreira de Carvalho

113. Gesiel Rios Lopes. algoritmos evolutivos multiobjetivos em modelagem de redes de múltiplas epidemias. Start: 2020. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP, Fundação de Amparo à Pesquisa ao Desenvolv. Científico e Tecnológico - MA. Supervisor: Alexandre Cláudio Botazzo Delbem

114. Giovana Augusta Benvenuto. Detecção de Áreas de Desmatamento e Focos de Incêndio via Aprendizado Profundo: Métodos, Algoritmos e Aplicações em Biomas Brasileiros. Start: 2022. Thesis (Ph.D. in Computer Science) - UNESP, CAPES. Supervisor: Wallace Correa de Oliveira Casaca

115. Giovanni Taraschi. Análise Numérica do Método de Elementos Finitos Híbrido Primal em Malhas Quadrilaterais. Start: 2021. Thesis (Ph.D. in Applied Mathematics) - UNICAMP, CNPq. Supervisor: Maicon Ribeiro Correa

116. Guilherme Brandão Martins. Filtragem Colaborativa utilizando Aprendizado Ativo. Start: 2019. Thesis (Ph.D. in Computer Science) - UFSCar, CAPES. Supervisor: João Paulo Papa

117. Guilherme Camargo de Oliveira. Affordable Diagnostics Using Deep Learning and AI. Start: 2021. Thesis (Ph.D. in Computer Science) - UNESP, CAPES. Supervisor: João Paulo Papa

118. Guilherme Mendonça Freire. Investigação de Uma Arquitetura de Variational Autoencoder para Representar Múltiplos Grupos. Start: 2020. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - ICMC - USP (USP, São Carlos). Supervisor: Mariana Cúri

119. Guilherme Valderramos Montroni. Image processing. Start: 2021. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP. Supervisor: Adriano Kamimura Suzuki

120. Gustavo Alencar Bisinotto. Development of an Environmental Monitoring System from On- Board Measurements of Vessel Movements with Machine Learning Techniques. Start: 2020. Thesis (Ph.D. in Mechanical Engineering) - USP. Co Supervisor: Fabio Gagliardi Cozman

121. Gustavo David Quintero Alvarez. Algoritmos de ordem superior para problemas do tipo OVO e LOVO. Start: 2019. Thesis (Ph.D. in Applied Mathematics) - USP, CAPES. Supervisor: Ernesto Julián Goldberg Birgin

122. Gustavo Evangelista Araújo. SínThesis de fala considerando regionalismos brasileiros. Start: 2022. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP, CAPES. Supervisor: Moacir Antonelli Ponti

123. Hanna Hortencio Pamplonna. Programação de atividades em sistemas multimáquinas (provisório). Start: 2022. Thesis (Ph.D. in Production Engineering) - USP. Supervisor: Débora Pretti Ronconi

124. Hans Muller Mendonca. Phase Dynamics of Complex Networks near Bifurcations. Start: 2018. Thesis (Ph.D. Mathematics) - USP. Supervisor: Tiago Pereira da Silva

125. Heitor Baldo. a ser definido. Start: 2020. Thesis (Ph.D. in Bioinformatics) - USP, CAPES. Co Supervisor: André Fujita

126. Heitor Baldo. a ser definido. Start: 2021. Thesis (Ph.D. in Bioinformatics) - USP, CAPES. Co Supervisor: André Fujita

127. Heloisa Vasques da Silva. Formulações baseadas em fluxo em arcos para extensões do problema de corte de estoque unidimensional. Start: 2022. Thesis (Ph.D. in Production Engineering) - UNESP, FAPESP. Supervisor: Silvio Alexandre de Araujo

128. Henrique Aquino. Uncertainty Quantification in CFD for nuclear power reactors. Start: 2023. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - Instituto de Ciencias matematicas e de computação, Univ. São Paulo. Supervisor: Roberto Federico Ausas

129. Hermínio Paucar Curasma. Modelagem e implementação de uma arquitetura distribuída multinível para processamento de stream de dados. Estudo de caso em veículos áereos não tripulados - VANTS. Start: 2021. Thesis Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - ICMC - USP. CAPES. Supervisor: Júlio Cézar Estrella

130. Hugo Felippe da Silva Lui. Shock-boundary layer interaction in supersonic axial turbines. Start: 2019. Thesis (Ph.D. in Ph.D. in Mechanical Engineering) - UNICAMP, FAPESP. Supervisor: William Roberto Wolf

131. hugo Leonardo França. Simulação numérica de escoamentos de fluidos complexos com superfícies livres. Start: 2019. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - ICMC - USP, FAPESP. Supervisor: José Alberto Cuminato

132. Humberto Gimenes Macedo. Desenvolvimento de Técnicas de Otimização para o Projeto Eficiente de Aerofólios. Start: 2022. Thesis (Ph.D. in Operations Research) - UNIFESP, CAPES. Supervisor: Luis Felipe Cesar da Rocha Bueno

133. Iman Ghodratitoostani. Modelagem neurocognitiva para doença do zumbido baseada em mineração de dados complexos. Start: 2016. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP. Supervisor: Alexandre Cláudio Botazzo Delbem

134. Isadora Ferrão. Resilient air taxi architecture for smart cities. Start: 2021. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - ICMC - USP, CAPES. Supervisor: Kalinka Regina Lucas Jaquie Castelo Branco

135. Iury Batista de Andrade Santos. Aprendizado de máquina interpretável para aplicações médicas baseadas em imagens. Start: 2022. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP, CNPq. Supervisor: André Carlos Ponce de Leon Ferreira de Carvalho

136. Ivan José dos Reis Filho. Mineração de Eventos com Enriquecimento Semântico. Start: 2019. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP. Co Supervisor: Ricardo Marcondes Marcacini

137. J Allan Antunes Lyrio. High-Fidelity Fluid-Structure Interaction Applied to Static Aeroelasticity of Typical Airliner Wings. Start: 2020. Thesis (Ph.D. in Science and Space Technologies) - ITA. Supervisor: Joao Luiz Filgueiras de Azevedo

138. Jamielli Tomaz Pereira. Regularidade em Controle otimo com restrições mistas. Start: 2016. Thesis (Ph.D. in Applied Mathematics) - UNICAMP, FAPESP. Supervisor: Roberto Andreani

139. Janielly Matos Vieira. Estratégias de controle visando a redução de infecção por COVID-19. Start: 2022. Thesis (Ph.D. in Biometria) - UNESP, CAPES. Supervisor: Helenice de Oliveira Florentino Silva

140. Jeanfranco David Farfan Escobedo. Data Assimilation in Oil Reservoirs. Start: 2021. Thesis (Ph.D. in Computer Science) - IC - UNICAMP, Shell Inc.. Supervisor: Anderson de Rezende Rocha

141. Jessica Suzana Barragan Alves. Novos desenvolvimentos na Análise de Propensity Scores para dados multiníveis sob a abordagem bayesiana. Start: 2019. Thesis (Ph.D. in Statistics) - USP, CAPES. Supervisor: Jorge Luis Bazan Guzman

142. Jianglong Yan. Development of complex network-based Graph Neural Networks (GNNs). Start: 2023. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP, CNPq. Supervisor: Zhao Liang

143. Jing Yang. Event Reconstruction from Heterogeneous Visual Data. Start: 2019. Thesis (Ph.D. in Computer Science) - IC - UNICAMP, FAPESP. Supervisor: Anderson de Rezende Rocha

144. João Phillipe Cardenuto. Detecting forgeries in scientific images. Start: 2020. Thesis (Ph.D. in Computer Science) - IC - UNICAMP, FAPESP. Supervisor: Anderson de Rezende Rocha

145. Johann Eduardo Castro Bolivar. Efeitos de produtos químicos sobre características de escoamento bifásico e trifásico em tubulação vertical e inclinada. Start: 2020. Thesis (Ph.D. in Mechanical Engineering) - USP - Escola de Engenharia de São Carlos, Fundação para o Incremento da Pesquisa e Aperfeiçoamento Industrial. Supervisor: Oscar Mauricio Hernandez Rodriguez

146. Jonas Coelho Kasmanas. Análise e Classificação de Microbiomas Humanos: Detecção de Bioindicadores e Otimização por meio de Aprendizado de Máquina. Start: 2019. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP, FAPESP. Supervisor: André Carlos Ponce de Leon Ferreira de Carvalho

147. José Dori Nascimento. Event filtering: determining pieces of evidence pertaining to a given event. Start: 2020. Thesis (Ph.D. in Computer Science) - IC - UNICAMP, FAPESP. Supervisor: Anderson de Rezende Rocha

148. Jose Luis Orozco. Genetic algorithm in Wolbachia-based biocontrol optimization. Start: 2022. Thesis (Ph.D. in Mathematics) - Universidad Del Valle, Ministerio de Ciencia Tecnología e Innovación. Co Supervisor: Helenice de Oliveira Florentino Silva

149. Josimar Edinson Chire Saire. Análise de Sentimento de Video utilizando Redes Complexas. Start: 2019. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP, CAPES. Supervisor: Zhao Liang

150. Juliano Koji Yugoshi. Multimodal Emotion Recognition using Graph Neural Networks. Start: 2023. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP. Supervisor: Ricardo Marcondes Marcacini

151. Jullian Souza Sone. Relações sinergéticas e economicas entre os serviços ecossistêmicos. Start: 2019. Thesis (Ph.D. in Hydraulic Engineering) - USP, CAPES. Supervisor: Edson Cezar Wendland

152. Junior Cesar Bonafim. Formulações p-step para o problema do caixeiro e o problema de caminho mínimo. Start: 2019. Thesis (Ph.D. in Production Engineering) - UFSCar. Supervisor: Pedro Augusto Munari Junior

153. Junior Rodrigues Ribeiro. Um modelo de tempo híbrido para sistemas lineares com saltos Markovianos. Start: 2020. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP, CNPq. Supervisor: Eduardo Fontoura Costa

154. Juniormar organista. Simulação de escoamentos bifásicos com método da interface imersa. Start: 2018. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP. Supervisor: Leandro Franco de Souza

155. Kamila Katayama Lyra. Dashboards como ferramenta de tomada de decisão sobre tecnologias educacionais. Start: 2017. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP. Supervisor: Seiji Isotani

156. Karelia Alexandra Vilca Salinas. Crime Prediction. Start: 2020. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP, FAPESP. Supervisor: Luis Gustavo Nonato

157. Kennedy Anderson Guimarães de Araujo. Problemas de scheduling com não linearidades. Start: 2019. Thesis (Ph.D. in Applied Mathematics) - USP, CAPES. Supervisor: Ernesto Julián Goldberg Birgin

158. Kleber de Santana Souza. Problemas de empacotamento com peças irregulares. Start: 2021. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP. Supervisor: Franklina Maria Bragion de Toledo

159. Kleber Sartorio. A definir. Start: 2021. Thesis (Ph.D. in Computer Science) - USP. Supervisor: Rodolfo Ipolito Meneguette

160. Laíza Ribeiro Silva. (a definir). Start: 2020. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP. Supervisor: Seiji Isotani

161. Laurindo Daniel Silva da Rocha. Coordenadas Conformes em Microscopia Eletrônica. Start: 2020. Thesis (Ph.D. in Applied Mathematics) - UNICAMP. Supervisor: Carlile Campos Lavor

162. Leandro Rocha. Simetrias em Geometria de Distâncias. Start: 2022. Thesis (Ph.D. in Applied Mathematics) - UNICAMP. Supervisor: Carlile Campos Lavor

163. Leonardo Claudio de Paula e Silva. Plataforma de gerenciamento e desenvolvimento de modelos de aprendizado de máquina. Start: 2022. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP. Supervisor: Claudio Fabiano Motta Toledo

164. Leonildo José de Melo de Azevedo. Estratégias para a fusão de dados em Internet das Coisas. Start: 2018. Thesis Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - ICMC - USP. Supervisor: Júlio Cézar Estrella

165. Letícia Maria Miquelin. Modelos métodos de solução para otimização energética em redes de abastecimento. Start: 2019. Thesis (Ph.D. in Production Engineering) - UNESP. Supervisor: Edilaine Martins Soler

166. Lívia Teresa Minami Borges. Métodos híbridos para resolução de problemas de despacho. Start: 03/2020. Start: 2020. Thesis (Ph.D. in Eletrical Engineering) - UNESP. Supervisor: Edilaine Martins Soler

167. Loriz Francisco Sallum. Não Definido. Start: 2021. Thesis (Ph.D. in Statistics) - USP. Supervisor: Francisco Louzada Neto

168. Loriz Francisco Sallum. Reconstrução de redes complexas. Start: 2022. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - ICMC - USP, CNPq. Supervisor: Francisco Aparecido Rodrigues

169. Luan Vinicius de Carvalho Martins. Graph Neural Networks for Medical Data Visualization. Start: 2020. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP, CAPES. Supervisor: Zhao Liang

170. Lucas Augusto Vieira Brito. modelo probabilísticos baseados em grafos para dados heterogêneos e aplicações. Start: 2020. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP, CAPES. Supervisor: Alexandre Cláudio Botazzo Delbem

171. Lucas Pereira Lopes. New machine learning tools. Start: 2019. Thesis (Ph.D. in Statistics) - USP. Supervisor: Nikolai Valtchev Kolev

172. Luiz Eduardo Manzoli Elias. Predição de Crimes. Start: 2022. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - ICMC - USP. Supervisor: Luis Gustavo Nonato

173. Luiz Henrique Romero. Controle e filtragem para Sistemas Lineares Sujeitos a Saltos Markovianos em Tempo Reverso. Start: 2020. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP, CAPES. Supervisor: Eduardo Fontoura Costa

174. Luiz Otávio Toratti. Discrete differential geometry. Start: 2021. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP. Supervisor: Adriano Kamimura Suzuki

175. Luiza Lober de Souza Piva. Dinâmica de sistemas não lineares através de aprendizado de máquina. Start: 2022. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - ICMC - USP, CNPq. Supervisor: Francisco Aparecido Rodrigues

176. Marcelo Henrique de Almeida. Não Definido. Start: 2021. Thesis (Ph.D. in Statistics) - USP. Supervisor: Francisco Louzada Neto

177. MARCELO ISAIAS DE MORAES JUNIOR. Graph Neural Embedding com Restrição Espaço-Temporal para Redes de Eventos. Start: 2022. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP, CAPES. Supervisor: Ricardo Marcondes Marcacini

178. Márcia Lorena Alves. Inferência em redes complexas. Start: 2021. Thesis (Ph.D. in Statistics) - USP. Supervisor: Francisco Aparecido Rodrigues

179. Marco Antonio Colombo da Silva. TBD. Start: 2020. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP. Supervisor: Rodolfo Ipolito Meneguette

180. Marco Aurélio Leonel Matunaga. Arquitetura Flexível para Otimização Multidisciplinar de Projeto com Ênfase em Aspectos Aerodinâmicos. Start: 2022. Thesis (Ph.D. in Science and Space Technologies) - ITA. Supervisor: Joao Luiz Filgueiras de Azevedo

181. Marcos Jardel Henriques. a definir. Start: 2017. Thesis (Ph.D. in Computer Science and Computational Mathematics) - USP-ICMC. Supervisor: Francisco Louzada Neto

182. Marcos Paulo Silva Gôlo. Classificação automática de textos por meio do aprendizado de máquina baseado em uma única classe utilizando redes neurais para grafos. Start: 2022. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP, CAPES. Supervisor: Ricardo Marcondes Marcacini

183. Marcos Vinícius dos Santos Ferreira. Análise de Série Temporal Fuzzy a partir da modelagem de componentes determinísticos e estocásticos. Start: 2020. Thesis (Ph.D. in Computer Science) - Universidade Federal da Bahia. Co Supervisor: Tatiane Nogueira Rios

184. Marcos Vinícius dos Santos Ferreira. Análise de Série Temporal Fuzzy a partir da modelagem de componentes determinísticos e estocásticos. Start: 2020. Thesis (Ph.D. in Computer Science) - Universidade Federal da Bahia. Supervisor: Ricardo Araújo Rios

185. Maria Clara Fava. Previsao de inundacoes urbanas usando sistemas de informacoes voluntarias. Start: 2015. Thesis (Ph.D. in Hydraulic) - USP, CAPES. Supervisor: Eduardo Mario Mendiondo

186. Maria Gabriela Valeriano. Sistemas de recomendação hospitalares. Start: 2020. Thesis (Ph.D. in Operations Research) - UNIFESP, CAPES. Supervisor: Ana Carolina Lorena

187. Marina Batalini de Macedo. Reúso de Águas Pluviais visando a Segurança do Nexo Água-Energia-Alimentos. Start: 2017. Thesis (Ph.D. in Hydraulic) - USP, CNPq. Supervisor: Eduardo Mario Mendiondo

188. Marina G. de Oliveira. Modelo de regressão bivariado para dados funcionais. Start: 2019. Thesis (Ph.D. in Ph.D. in Statistics) - UFSCar, CAPES. Co Supervisor: Carlos Alberto Ribeiro Diniz

189. Marina Gandolfi. Modelo Skellam Modificado. Start: 2018. Thesis (Ph.D. in Statisticsa) - USP-UFSCar, CAPES. Supervisor: Katiane Silva Conceição

190. Marina Gandolfi. Modelo Skellam modificado. Start: 2019. Thesis (Ph.D. in Ph.D. in Statistics) - UFSCar, CAPES. Co Supervisor: Carlos Alberto Ribeiro Diniz

191. Marlon Jeske. Ciência de dados para o planejamento da implementação de redes mesh. Start: 2019. Thesis (Ph.D. in Operations Research) - UNIFESP, CNPq. Supervisor: Mariá Cristina Vasconcelos Nascimento Rosset

192. Mateus Paranaíba Ribeiro. Simulação da camada-limite atmosférica utilizando Large-eddy simulation. Start: 2020. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP, CAPES. Co Supervisor: Leandro Franco de Souza

193. Mateus Paranaiba Ribeiro. Simulação da camada-limite atmosférica utilizando Large-eddy simulation. Start: 2020. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP, CAPES. Supervisor: Livia Souza Freire Grion

194. Matheus de Padua Severino. Mixing-controlled supersonic combustion: effects of hydrodynamic instabilities. Start: 2020. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP. Supervisor: Leandro Franco de Souza

195. matheus maia beraldo. surface pressure fluctuations in a transitional boundary layer. Start: 2019. Thesis (Ph.D. in Mechanical Engineering) - USP, CAPES. Supervisor: Marcello Augusto Faraco de Medeiros

196. Maurício Rocha Gonçalves. Análise de flexibilidade em problemas de dimensionamento de lotes. Start: 2020. Thesis (Ph.D. in Mathematics) - UNESP, FAPESP. Supervisor: Silvio Alexandre de Araujo

197. Maycon César Calixto Assis. A definir. Start: 2023. Thesis (Ph.D. in Mathematics) - UNESP, CAPES. Supervisor: Silvio Alexandre de Araujo

198. Michele Maciel Sacramento. Modelos de sobrevivência induzidos por fragilidade. Start: 2019. Thesis (Ph.D. in Statistics) USP. Supervisor: Vicente Garibay Cancho

199. Milton Miranda Neto. Não Definido. Start: 2019. Thesis (Ph.D. in Statistics) - USP. Supervisor: Francisco Louzada Neto

200. Mônica Paula de Souza Martins. Abandono em Cálculo I: Investigando essa Realidade. Start: 2019. Thesis (Ph.D. in Mathematics) - UNICAMP. Supervisor: Lucio Tunes dos Santos

201. Murilo Cunha dos Santos. Reconhecimento de padrões de dados heterogêneos de múltiplas fontes em tempo real. Start: 2020. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP, CAPES. Supervisor: Alexandre Cláudio Botazzo Delbem

202. Naiara Caroline Aparecido dos Santos. Novos desenvolvimentos na contagem de dados para variáveis latentes.. Start: 2019. Thesis (Ph.D. in Statistics) - USP, CAPES. Supervisor: Jorge Luis Bazan Guzman

203. Nícolas Samuel Assis. A definir. Start: 2020. Thesis (Ph.D. in Mathematics) - UNESP, CAPES. Supervisor: Maria do Socorro Nogueira Rangel

204. Normando Amazonas. Predicting Deforestation from Transportation Data. Start: 2020. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - ICMC - USP. Supervisor: Luis Gustavo Nonato

205. Oliviana Xavier do Nascimento. Modelagem e resolução de problemas de empacotamento irregular em faixa bidimensional com incerteza na demanda. Start: 2018. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP, CAPES. Supervisor: Marina Andretta

206. Osafu Augustine Egbon. Não Definido. Start: 2019. Thesis (Ph.D. in Statistics) - USP. Supervisor: Francisco Louzada Neto

207. Patrice London Guedes. "Smart Automation - To Optimize Aircraft Performance and Improve Flight Safety". Start: 2021. Thesis (Ph.D. in Aeronautical and Mechanical Engineering) - ITA. Supervisor: Roberto Gil Annes da Silva

208. Patricia Shizue Matsumura Ueda. A definir. Start: 2022. Thesis (Ph.D. in Operations Research) - UNIFESP, CAPES. Supervisor: Ana Carolina Lorena

209. Patricia Stülp. Novos modelos bivariados para resposta limitada e discreta.. Start: 2019. Thesis (Ph.D. in Statistics) - USP, CAPES. Supervisor: Jorge Luis Bazan Guzman

210. Paula Cristina Rohr Ertel. A definir. Start: 2023. Thesis (Ph.D. in Applied Mathematics) - USP, CAPES. Supervisor: Ernesto Julián Goldberg Birgin

211. Paula Giovana Rodrigues. Cooperação em redes complexas. Start: 2021. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - ICMC - USP. Supervisor: Francisco Aparecido Rodrigues

212. Paulo Henrique das Chagas Silva. A resolução de problemas na introdução de conteúdos e conceitos matemáticos: um olhar a partir das questões da Olimpíada Brasileira de Matemática das Escolas Públicas. Start: 2019. Thesis (Ph.D. in Mathematics - UNICAMP. Supervisor: Laura Leticia Ramos Rifo

213. Pedro Arbs Paiva. An instance space analysis of classification datasets. Start: 2019. Thesis (Ph.D. in Electronics and Computer Engineering) - ITA. Supervisor: Ana Carolina Lorena

214. Pedro Henrique Toledo de Oliveira Sousa. Clustering Functional Data via high order derivatives. Start: 2019. Thesis (Ph.D. in Statistics) - UNICAMP, CAPES. Supervisor: Ronaldo Dias

215. Pedro José Miranda Lugo. Desenvolvimento de instabilidade hidrodinâmica em escoamento estratificado líquido-líquido. Start: 2019. Thesis (Ph.D. in Mechanical Engineering) - USP - Escola de Engenharia de São Carlos, CAPES. Supervisor: Oscar Mauricio Hernandez Rodriguez

216. Priscylla Silva. Explainable Machine Learning. Start: 2021. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - ICMC - USP. Supervisor: Luis Gustavo Nonato

217. Rafael Cerqueira de Campos. Liquid animation. Start: 2017. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP. Supervisor: Adriano Kamimura Suzuki

218. Rafael de Lima Sterza. Estabilidade de Escoamento de Jato Viscoelástico Tridimensional. Start: 2021. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP, CAPES. Supervisor: Leandro Franco de Souza

219. Rafael Delalibera Rodrigues. Análise de EEGs utilizando redes complexas. Start: 2018. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP. Supervisor: Zhao Liang

220. Rafael Morais Pereira. Determinantes do desenvolvimento de competências de inovação locais e não locais em subsidiárias. Start: 2018. Thesis (Ph.D. in Management) USP, CAPES. Supervisor: Moacir de Miranda Oliveira Junior

221. Rafael Rodrigues dos Santos. Indices de variabilidade da frequência cardíaca e apneia obstrutiva do sono: diagnóstico e severidade. Start: 2020. Thesis (Ph.D. in Fisiologia) - USP, CAPES. Co Supervisor: Renato Tinós

222. Rafaella Silva Ferreira. Desenvolvimento de Soluções Inteligentes de Aferição Epidemiológica da Covid-19 Frente ao Desafio da Escassez de Dados no Contexto Nacional. Start: 2023. Thesis (Ph.D. in Computer Science) - UNESP, CAPES. Supervisor: Wallace Correa de Oliveira Casaca

223. Renato da Silva Fernandes. Método de estimação para modelos de diagnóstico cognitivo. Start: 2019. Thesis (Ph.D. in Statistics) - USP. Supervisor: Jorge Luis Bazan Guzman

224. Ricardo Aurélio Fragoso de Sousa. A definir. Start: 2022. Thesis (Ph.D. in Mechanical Engineering) - Universidade Federal de Pernambuco. Co Supervisor: Paulo Henrique Ferreira da Silva

225. Ricardo de J. C. Assis. Uma nova alternativa de algoritmo de predição. Start: 2021. Thesis (Ph.D. in Ph.D. in Statistics) - UFSCar. Supervisor: Carlos Alberto Ribeiro Diniz

226. Robson Parmezan Bonidia. Biological Sequence Analysis: A Generic Pipeline with Metaheuristics, Mathematical, and Ensemble Models. Start: 2020. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP, CAPES. Supervisor: André Carlos Ponce de Leon Ferreira de Carvalho

227. Rodrigo Aécio Felix. Desenvolvimento e aplicação de avaliações formativas em rede de ensino utilizando testes adaptativos computadorizados. Start: 2022. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - ICMC - USP (USP, São Carlos). Supervisor: Mariana Cúri

228. Rodrigo Barbosa Moreira. Condições de Otimalidade Sequenciais em Controle Ótimo. Start: 2020. Thesis (Ph.D. in Mathematics) - UNESP, CAPES. Supervisor: Valeriano Antunes de Oliveira

229. Rodrigo Franciquini da Silva. Análise espectral para detecção de anomalias em redes dinâmicas com atributos. Start: 2017. Thesis (Ph.D. in COmputer Science) - UNIFESP, FAPESP. Supervisor: Mariá Cristina Vasconcelos Nascimento Rosset

230. Rodrigo Henrique Ramos. Discovery of cancer genes patterns using super pathways networks topology. Start: 2020. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP. Supervisor: Adenilso da Silva Simão

231. Rodrigo Sorbilli Cardoso de Sousa. Metodologia de determinação do impacto aerodinâmico do acréscimo de gelo em aeronaves. Start: 2021. Thesis (Ph.D. in Aeronautical and Mechanical Engineering) - ITA. Supervisor: Roberto Gil Annes da Silva

232. Rogério da Silva Matos. A definir. Start: 2022. Thesis (Ph.D. in Applied Mathematics) - USP, CAPES. Supervisor: Ernesto Julián Goldberg Birgin

233. Rômulo da Silva Marques. Novas Ordens para o Problema do Loop Fechado. Start: 2021. Thesis (Ph.D. in Applied Mathematics) - UNICAMP, CAPES. Supervisor: Carlile Campos Lavor

234. Samuel Rocha Silva. Liquid animation. Start: 2018. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP, CNPq. Supervisor: Adriano Kamimura Suzuki

235. Saulo Neves Matos. Aliando processamento de imagens e sensores para prever enchentes. Start: 2023. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP, Fundação de apoio da UFMG. Supervisor: Jó Ueyama

236. Sherban Leonardo Cretoiu. Inovação e internacionalização: Desafios para as multinacionais brasileiras. Start: 2018. Thesis (Ph.D. in Management) USP. Supervisor: Moacir de Miranda Oliveira Junior

237. Sherlon Almeida da Silva. Self-supervised learning for visual cross-domain information retrieval based on multimodal queries. Start: 2021. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP. Supervisor: Moacir Antonelli Ponti

238. Soroor Salavati. Rock-type classification in pre-salt fields. Start: 2020. Thesis (Ph.D. in Computer Science) - IC - UNICAMP, Shell Inc.. Supervisor: Anderson de Rezende Rocha

239. Stephane de Freitas Schwarz. Phishing Detection. Start: 2021. Thesis (Ph.D. in Computer Science) - IC - UNICAMP, SINCH Inc.. Supervisor: Anderson de Rezende Rocha

240. Tarcísio Costa Déda Oliveira. Feedback control strategies for comperssible unsteady flows. Start: 2019. Thesis (Ph.D. in Ph.D. in Mechanical Engineering) - UNICAMP, FAPESP. Supervisor: William Roberto Wolf

241. Thaís Mélega Prandini. Regulação e Competição no Setor Elétrico Brasileiro. Start: 2017. Thesis (Ph.D. in Management) USP. Supervisor: Moacir de Miranda Oliveira Junior

242. Thales de Oliveira Gonçalves. Análise e Predição de Crimes em Ambientes Urbanos. Start: 2019. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - ICMC - USP, CAPES. Supervisor: Luis Gustavo Nonato

243. Thiago José dos Santos Vieira. Formulações e métodos exatos e heurísticos para o roteamento de aeronaves com restrições de tripulação. Start: 2020. Thesis (Ph.D. in Production Engineering) - UFSCar, CAPES. Supervisor: Pedro Augusto Munari Junior

244. Thyago Tenório Martins de Oliveira. Abordagem baseada em sabedoria das multidões para criação de loops internos em Sistemas Tutores Inteligentes. Start: 2019. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP, CAPES. Supervisor: Seiji Isotani

245. Tiago Priolli Monteiro. Coupled Simulations of Leading-Edge Suction Parameter Modulated Non-Linear Unsteady Vortex Lattice Method with Wind Tunnel Validation. Start: 2016. Thesis (Ph.D. in Aeronautical and Mechanical Engineering) - ITA. Supervisor: Roberto Gil Annes da Silva

246. Uebert Gonçalves Moreira. Multiscale methods for fractured petroleum reservoirs. Start: 2019. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP, Petrobras S. A.. Supervisor: Fabrício Simeoni de Sousa

247. Veronica de M. N. Nagata. Capacidades dinâmicas e sustentabilidade ambiental: Um estudo na indústria de mineração. Start: 2018. Thesis (Ph.D. in Management) USP. Supervisor: Moacir de Miranda Oliveira Junior

248. Verônica Vannini. Proposta de arquitetura inteligente para VANTs. Start: 2022. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP, CAPES. Supervisor: Claudio Fabiano Motta Toledo

249. Victor Barcelos Victorino. The effect of gaps and bumps on boundary layer transition. Start: 2022. Thesis (Ph.D. in Mechanical Engineering) - USP, Boeing Company. Supervisor: Marcello Augusto Faraco de Medeiros

250. Victor Castro Nassif de Faria. On building ensembles of diverse and competent classifiers. Start: 2022. Thesis (Ph.D. in Operations Research) - UNIFESP, FAPESP. Supervisor: Ana Carolina Lorena

251. Victor Hugo Nascimento Rocha. Detecção de Argumentos Probabilísticos. Start: 2021. Thesis (Ph.D. in Eletrical Engineering) - USP, CAPES. Supervisor: Fabio Gagliardi Cozman

252. Vinicius Cabral da Silva. Condições de otimalidade para problemas de controle. Start: 2022. Thesis (Ph.D. in Mathematics) - UNESP. Supervisor: Geraldo Nunes Silva

253. Vinicius Lopes. (a definir). Start: 2021. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP, CNPq. Supervisor: Seiji Isotani

254. Walter Affonso Junior. Análise exergética de aeronaves de propulsão híbrido elétrica. Start: 2019. Thesis (Ph.D. in Aeronautical and Mechanical Engineering) - ITA. Supervisor: Roberto Gil Annes da Silva

255. Wanderley Pires Cunha. Avaliação metrológica em laboratório de configurações de propriedades de massa de engenhos espaciais com voo propulsado e autômato. Start: 2021. Thesis (Ph.D. in Science and Space Technologies) - ITA. Supervisor: MARIA LUÍSA COLLUCCI DA COSTA REIS

256. Wilmax Marreiro Cruz. Luvas Sensitivas no Aprendizado de Piano. Start: 2016. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP, CAPES. Supervisor: Seiji Isotani

257. Ximena Pocco. Crime Pattern Understanding. Start: 2020. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - ICMC - USP, FAPESP. Supervisor: Luis Gustavo Nonato

258. Yangyang Chen. Deformação em Procesos Espaço-Temporal via Wavelets. Start: 2019. Thesis (Ph.D. in Statistics) - USP, FAPESP. Co Supervisor: Ronaldo Dias

259. Yuri Verges. Line integral on discrete grids and applications. Start: 2022. Thesis (Ph.D. in Statistics) - USP. Supervisor: Nikolai Valtchev Kolev

260. Zeray Hagos. Dynamical Bayesian Methods in Complex Systems. Start: 2018. Thesis (Ph.D. Mathematics) - USP, CNPq. Supervisor: Tiago Pereira da Silva

261. Zheng Bian. Reduction Techniques in Heterogeneous Networks vai Ergodic Theory. Start: 2018. Thesis (Ph.D. in Applied Mathematics) - USP, FAPESP. Supervisor: Tiago Pereira da Silva

A.2 COMPLETED Ph.D's

1. Ana Paula Jorge do Espirito Santo. Survival Model Induced by Frailty for Lifetime with long-Term Survivors and Unobserved Heterogeneity. 2022. Thesis (Ph.D. in Statistics) -USP, CAPES. Supervisor: Vicente Garibay Cancho.

2. Antonio Carlos Theophilo Costa Jr.. Authorship Attribution of Small Messages. 2022. Thesis (Ph.D. in Computer Science) - IC - UNICAMP, FAPEMIG. Supervisor: Anderson de Rezende Rocha.

3. Aura María Jalal Osorio. Optimization models and solution methods for logistics network planning. 2022. Thesis (Ph.D. in Proction Engineering) - UFSCar, FAPESP. Supervisor: Reinaldo Morabito Neto.

4. Calvin Rodrigues da Costa. Traveling Backpacker Problem with priorities: mono-objective and multi-objective formulations. 2023. Thesis (Ph.D. in Operations Research) - UNIFESP, CAPES. Supervisor: Mariá Cristina Vasconcelos Nascimento Rosset.

5. Camila Afonso Faria Lages. Método de projeção multiescala e malhas hierárquicas para escoamentos incompressíveis modelados pelas equações de Navier-Stokes. 2023. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP, CAPES. Supervisor: Fabrício Simeoni de Sousa.

6. Caroline Lourenço Alves. Diagnóstico de transtornos mentais usando ciência de dados. 2022. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - ICMC - USP, CNPq. Supervisor: Francisco Aparecido Rodrigues.

7. Danilo Colombo. Caracterização do Comportamento de Confiabilidade das Barreiras de Segurança de Poços de Petróleo em Diferentes Condições de Operação Utilizando Aprendizado de Máquina. 2023. Thesis (Ph.D. in Engenharia de Produção) - Instituto Federal Fluminense, . CoSupervisor: João Paulo Papa.

8. Diana Carolina Roca Arroyo. A Modified Echo State Network Model Using Non-Random Topology. 2023. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP, CAPES. Supervisor: Zhao Liang.

9. Edresson Casanova. SínThesis de fala aplicada à geração de conjunto de dados para reconhecimento automático de fala. 2022. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP, CAPES. Supervisor: Moacir Antonelli Ponti.

10. Eduardo Machado Silva. The One-dimensional Multi-Period Cutting Stock Problem with Setup Cost. 2023. Thesis (Ph.D. in Mathematics) - UNESP, CAPES. Supervisor: Silvio Alexandre de Araujo.

11. Elizbeth Chipa Bedia. Bivariate survival models induced by frailty. 2022. Thesis (Ph.D. in Statistics) - USP, CAPES. Supervisor: Vicente Garibay Cancho.

12. Emerson Cruz. Redes bayesianas, redes credais e inferência causal: uma aplicação na análise do impacto da gravidez na adolescência sobre a evasão escolar. 2022. Thesis (Ph.D. in Electrical Engineering) - USP, . Supervisor: Fabio Gagliardi Cozman.

13. Eron Tiago Viana Dauricio. Wall-Modeled Large Eddy Simulations with Emphasis on the Treatment of External Flow Configurations. 2022. Thesis (Ph.D. in Science and Space Technologies) - ITA, FAPESP. Supervisor: Joao Luiz Filgueiras de Azevedo.

14. Fábio Felix Dias. Aprendizado de representações com redes neurais profundas para classificação de sons de pássaros e anuros. 2022. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP, CAPES. CoSupervisor: Moacir Antonelli Ponti.

15. Gustavo Henrique de Rosa. Geração de Linguagem Natural Utilizando Aprendizado Adversarial Baseado em Similaridade. 2022. Thesis (Ph.D. in Computer Science) - UNESP, FAPESP. Supervisor: João Paulo Papa.

16. Hélio Correia da Silva Jhunior. Integração de imagem micro-CT com Geoestatística de Multi-ponto para modelagem do escoamento em fratura pelo Método dos Elementos Analíticos. 2023. Thesis (Ph.D. in Hidraulic Engineering) - USP, CNPq. Supervisor: Edson Cezar Wendland.

17. Hugo Leonardo França. Numerical simulation of complex fluid flows with free surface. 2023. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - ICMC - USP, FAPESP. CoSupervisor: Cassio Machiaveli Oishi.

18. Iman Ghodratitoostani. Plataforma de computação neurocognitiva:protótipo na reabilitação do zumbido através da regulação da emoção concomitante com a estimulação transcraniana por corrente direta de alta definição como técnica de neuromodulação. 2022. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - ICMC - USP, FAPESP. Supervisor: Alexandre Cláudio Botazzo Delbem.

19. Jaqueline Alvarenga Silveira. TensorAnalyzer: Identificação de Padrões Urbanos em Grandes Cidades usando Fatoração Não-Negativa de Tensores. 2022. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP, CAPES. Supervisor: Afonso Paiva Neto.

20. João Paulo Pereira de Sá Canário. On deep learning features for noisy time series classification. 2022. Thesis (Ph.D. in Computer Science) - UFBA, CAPES. Supervisor: Ricardo Araújo Rios.

21. Kamyla Maria Ferreira. Problema de Roteamento de Veículos com Restrições de Empacotamento Bidimensional e Entrega Fracionada para a Minimização da Emissão de Dióxido de Carbono. 2022. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP, CAPES. Supervisor: Franklina Maria Bragion de Toledo.

22. Laison Junio da Silva Furlan. Estudo de Escoamentos Transicionais Tridimensionais de Fluidos Viscoelásticos modelados por FENE-P. 2022. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP, . Supervisor: Leandro Franco de Souza.

23. Layane Rodrigues de Souza Queiroz. Estudo de problemas de corte de itens irregulares com incertezas. 2022. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP, CAPES. Supervisor: Marina Andretta.

24. Leandro Anghinoni. Structure characterization of complex networks for machine learning. 2023. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP, CAPES. Supervisor: Zhao Liang.

25. Leonardo Murilo Nepomuceno. Estudo de técnicas de identificaçao de sistemas de aeronaves em sub-escala. 2022. Thesis (Ph.D. in Aeronautical and Mechanical Engineering) - ITA, . Supervisor: Roberto Gil Annes da Silva.

26. Lorrany Cristina da Silva. Otimização de uso de Pista no Gerenciamento de Fluxo de Tráfego Aéreo: O Problema de Pouso de Aeronaves. 2022. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP, FAPESP. Supervisor: André Carlos Ponce de Leon Ferreira de Carvalho.

27. LUIZ FERNANDO RODRIGUES. Algoritmos Evolutivos Aplicados ao Problema de Roteamento e Produção. 2022. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP, . Supervisor: Maristela Oliveira dos Santos.

28. Luiz Henrique Fernandes. Meta-analysis of clustering problem instances and techniques in Machine Learning. 2022. Thesis (Ph.D. in Operations Research) - UNIFESP, . Supervisor: Ana Carolina Lorena.

29. Magna Paulina de Souza Ferreira. Modelagem Estocástica Aplicada a Problemas Industriais: Estudos de Casos Reais. 2022. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP, . Supervisor: Claudio Fabiano Motta Toledo.

30. Mariana Rodrigues. SEMU - SErvice Management for UAVs. 2022. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - ICMC - USP, CAPES. Supervisor: Kalinka Regina Lucas Jaquie Castelo Branco.

31. Marina Alencar Valença. Reformulação do problema de Fluxo de Potência Ótimo Discreto com restrições disjuntivas e de complementaridade. 2023. Thesis (Ph.D. in Electrical Engineering) - UNESP, . Supervisor: Edilaine Martins Soler.

32. Mateus Roder. Aprendizado Profundo para Auxílio ao Diagnóstico de Acidente Vascular Cerebral. 2023. Thesis (Ph.D. in Computer Science) - UNESP, FUSP - Fundação de Apoio à USP. Supervisor: João Paulo Papa.

33. Michelle Fernandino Westin. POST-FLUTTER ANALYSIS OF AEROELASTIC SYSTEMS. 2022. Thesis (Ph.D. in Aeronautical and Mechanical Engineering) - ITA, . Supervisor: Roberto Gil Annes da Silva.

34. Moisés Rocha dos Santos. Seleção e compreensão de desempenho de algoritmos para previsão de séries temporais. 2023. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP, FAPESP. Supervisor: André Carlos Ponce de Leon Ferreira de Carvalho.

35. Pâmela de Souza Dias. Análise visual aplicada em processos de judicialização de doenças raras do estado de São Paulo. 2022. Thesis (Ph.D. in Management) - FEARP - USP, CAPES. Supervisor: Evandro Marcos Saidel Ribeiro.

36. Rafael Soares Padilha. Learning visual clues of the passage of time. 2022. Thesis (Ph.D. in Computer Science) - IC - UNICAMP, FAPESP. Supervisor: Anderson de Rezende Rocha.

37. Renan William Prado. Sobre condições sequenciais de otimalidade associadas ao esquema algorítmico de Lagrangiano aumentado. 2023. Thesis (Ph.D. in Applied Mathematics) - UNICAMP, FAPESP. Supervisor: Sandra Augusta Santos.

38. Renato Fuzaro Miotto. Investigation of dynamic stall through high fidelity numerical simulations and data-driven techniques. 2022. Thesis (Ph.D. in Mechanical Engineering) - UNICAMP, FAPESP. Supervisor: William Roberto Wolf.

39. Rodrigo Koiti Ishizaka. Validação estatística da retração de Fibonacci para a seleção de carteira. 2023. Thesis (Ph.D. in Mathematics) - UNESP, CAPES. Supervisor: Geraldo Nunes Silva.

40. Rosalía Taboada Leiva. Desenvolvimento e implementação numérica de modelos viscoelásticos generalizados e o estudo de fluidos complexos. 2022. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - ICMC - USP, CNPq. Supervisor: Antonio Castelo Filho.

41. Saulo Martiello Mastelini. Multi-target data stream mining. 2023. Thesis (Ph.D. in Computer Sciences and Computational Mathematics) - USP, FAPESP. Supervisor: André Carlos Ponce de Leon Ferreira de Carvalho.

42. Thiago Siqueira. Uma globalização via Restauração Inexata do método de Programação Linear Sequencial para resolver problemas de Otimização Topológica. 2022. Thesis (Ph.D. in Operations Research) - UNIFESP, . Supervisor: Luís Felipe Cesar da Rocha Bueno.

43. Vitor Mesaque Alves de Lima. Opinion Mining for App Reviews: Identifying and Prioritizing Emerging Issues for Software Maintenance and Evolution. 2023. Thesis (Ph.D. in Computer Science) - UFMS, . Supervisor: Ricardo Marcondes Marcacini.

A.3   ONGOING M.Sc.

1. Aguimar Ribeiro Junior. a definir. Start: 2021. Thesis (M.Sc. in Computer Sciences and Computational Mathematics) - USP. Supervisor: Rodolfo Ipolito Meneguette

2. Alex Augusto Nunes Machado. Heurísticas de Decomposição para um Problema Integrado de Dimensionamento de lotes e roteamento. Start: 2023. Thesis (Professional M.Sc. in Computer Sciences and Computational Mathematics) - USP/São Carlos. Supervisor: Maristela Oliveira dos Santos

3. Alex Paranahyba de Abreu. Problemas de roteamento de veículos com coletas e entregas sob incertezas nos tempos de viagem e demandas. Start: 2022. Thesis (M.Sc. in Production Engineering) - UFSCar. Supervisor: Pedro Augusto Munari Junior

4. Alexandre Morelli Alves De Oliveira. Modelos matemáticos para otimização energética. Start: 03/2021. Start: 2021. Thesis (M.Sc. in Production Engineering) - UNESP, CAPES. Supervisor: Edilaine Martins Soler

5. Alexis Aldo Mendoza Villarroel. Sedentarism detection using wearable signals. Start: 2022. Thesis (Professional M.Sc.) - IC - UNICAMP, Samsung Eletrônica da Amazônia. Supervisor: Anderson de Rezende Rocha

6. Aline Marra Campos. Otimização de redes de abastecimento: estudo de caso em São Carlos-SP. Start: 2021. Thesis (M.Sc. in Hydraulic Engineering) - USP, CAPES. Supervisor: Edson Cezar Wendland

7. Amanda Hellen de Avellar Sarmento. TBD. Start: 2021. Thesis (Professional M.Sc. in Applied Mathematics, Statistics and Computing Applied to Industry) - USP. Supervisor: Moacir Antonelli Ponti

8. Ana Claudia Guimarães Santos. (a definir). Start: 2021. Thesis (M.Sc. in Computer Sciences and Computational Mathematics) - USP. Supervisor: Seiji Isotani

9. Ana Rosalia Huaman Reyna. a definir. Start: 2021. Thesis (M.Sc. in Computer Sciences and Computational Mathematics) - USP, CAPES. Supervisor: Rodolfo Ipolito Meneguette

10. Andreza Ferreira. (a definir). Start: 2020. Thesis (M.Sc. in Computer Sciences and Computational Mathematics) - USP, CAPES. Supervisor: Seiji Isotani

11. Angelo Victor Kraemer Foletto. Combinando as camadas IoT de sensores e do portal para detectar enchentes. Start: 2021. Thesis (M.Sc. in Computer Sciences and Computational Mathematics) - USP, CAPES. Supervisor: Jó Ueyama

12. Anna Bárbara Coré Pinto. Proposição de um Modelo Epidemiológico pela Abordagem dos Fenômenos de Transporte. Start: 2020. Thesis (Professional M.Sc. in Applied Mathematics, Statistics and Computing Applied to Industry) - ICMC - USP da USP. Supervisor: Jose Antonio Rabi

13. Ariadne Nascimento Matos. Reconhecimento automático de fala em Português nos regionalismos brasileiros. Start: 2022. Thesis (Professional M.Sc. in Computer Sciences and Computational Mathematics) - USP, CAPES. Supervisor: Moacir Antonelli Ponti

14. ARIEL MENEZES DE ALMEIDA JUNIOR. Modelagem Causal para Estudo de Viés Racial em Sistemas de Detecção de Face. Start: 2021. Thesis (M.Sc. in Computer Sciences) - Universidade Federal da Bahia, CAPES. Supervisor: Ricardo Araújo Rios

15. Arthur Dantas Mangussi. An unified approach for dealing with missing and noise data. Start: 2022. Thesis (Professional M.Sc. in Operations Research) - UNIFESP, FAPESP. Supervisor: Ana Carolina Lorena

16. Arthur Dorigueto Delevedove. Crime Analysis. Start: 2022. Thesis (Professional M.Sc. in Applied Mathematics, Statistics and Computing Applied to Industry) - USP, CAPES. Supervisor: Adriano Kamimura Suzuki

17. Artur Souza Freitas. Avaliação do desempenho de características sociais do nó como medida de seleção de veículos em redes veiculares de aprendizado federado. Start: 2020. Thesis (Professional M.Sc. in Applied Mathematics, Statistics and Computing Applied to Industry) - Instituto de Ciencias Matematicas e de Computacao. Supervisor: Júlio Cézar Estrella

18. Atila Ferreira Pessoa. Técnicas de Machine Learning aplicadas ao estudo de intrusão de vapores. Start: 2021. Thesis (Professional M.Sc. in Applied Mathematics, Statistics and Computing Applied to Industry) - USP. Supervisor: Fabrício Simeoni de Sousa

19. Beatriz Ribeiro Bello. Heurísticas para otimização energética em sistemas de distribuição de água. Start: 03/2022. Start: 2022. Thesis (Professional M.Sc. in Applied and Computing Mathematics) - UNESP, CAPES. Supervisor: Edilaine Martins Soler

20. Benedito Faustinoni. a definir. Start: 2021. Thesis (Professional M.Sc. in Applied Mathematics, Statistics and Computing Applied to Industry) - ICMC - USP. Supervisor: Victor Claudio Bento de Camargo

21. Bernardo Abreu da Cruz. Problemas de carregamento de veículo multicompartimentado. Start: 2021. Thesis (M.Sc. in Applied Mathematics e Computacional) - Universidade Estadual de Londrina, Fundação Araucária de Apoio ao Desenvolvimento Científico e Tecnológico. Supervisor: Aline Aparecida de Souza Leão

22. Bernardo Mota Barbosa. Análise de risto de equipamentos da indústria do petroleo. Start: 2021. Thesis (Professional M.Sc. in Applied Mathematics, Statistics and Computing Applied to Industry) - ICMC - USP. Supervisor: Antonio Castelo Filho

23. Brenda Lima Boaventura. A definir. Start: 2021. Thesis (M.Sc. in Mathematics) - Universidade Federal da Bahia, Fundação de Amparo à Pesquisa do Estado da Bahia. Co Supervisor: Paulo Henrique Ferreira da Silva

24. Brendo Henrique de Lima. Aplicação de algoritmos de aprendizado de máquina para predição do valor de mercado de empresas. Start: 2023. Thesis (M.Sc. in Informática) - Universidade Federal de Alagoas. Co Supervisor: Diego Carvalho do Nascimento

25. Breno Kenji Ogata. Control Strategies for Deformable Microswimmers. Start: 2023. Thesis (M.Sc. in Computer Sciences and Computational Mathematics) - Instituto de Ciencias matematicas e de computação, Univ. São Paulo, CAPES. Supervisor: Roberto Federico Ausas

26. Bruno Miquéias de Melo. Utilização de algoritmo de inteligência artificial para otimização da manutenção preventiva em bombas submersas. Start: 2023. Thesis (M.Sc. in Applied Computing) - USP. Supervisor: Renato Tinós

27. Caio Fabrício Deberaldini Netto. Interpretando Sistemas de Perguntas/Respostas Baseados em Métodos Neuro-Simbólicos. Start: 2021. Thesis (Professional M.Sc. in Electrical Engineering) - USP, Fundação da USP. Supervisor: Fabio Gagliardi Cozman

28. Cairo Mateus Neves Ribeiro. Fluxos de trabalho inteligentes para a coleta, processamento e armazenamento de dados de sensores em Smart Building. Start: 2020. Thesis (Professional M.Sc. in Applied Mathematics, Statistics and Computing Applied to Industry) - Instituto de Ciencias Matematicas e de Computacao, CAPES. Supervisor: Júlio Cézar Estrella

29. Callebe Rocha Reis. Métodos de decomposição de domínio multiescala para o modelo de Stokes-Brinkman. Start: 2023. Thesis (M.Sc. in Computer Sciences and Computational Mathematics) - USP. Supervisor: Fabrício Simeoni de Sousa

30. Camila Braz Soares. A definir. Start: 2023. Thesis (M.Sc. in Mathematics) - Universidade Federal da Bahia. Supervisor: Paulo Henrique Ferreira da Silva

31. Camila Castro Moreno. Mapping the competences of Machine Learning classifiers in Instance Spaces. Start: 2021. Thesis (M.Sc. in Operations Research) - UNIFESP. Supervisor: Ana Carolina Lorena

32. Camila Machado de Araújo. Automatic Analysis of X-Ray Diffraction Patterns with Deep Learning. Start: 2022. Thesis (Professional M.Sc.) - IC - UNICAMP, Instituto Serrapilheira. Supervisor: Anderson de Rezende Rocha

33. Camila Machado de Araujo. Inteligência Artificial para Descoberta de Materiais Supercondutores. Start: 2021. Thesis (M.Sc.) - IC - UNICAMP, Instituto Serrapilheira. Co Supervisor: Anderson de Rezende Rocha

34. Carlos Alonso Rodrigues. Análise de Estabilidade de Camadas Limite Compressíveis. Start: 2021. Thesis (M.Sc. in Mechanical Engineering) - UNICAMP. Supervisor: William Roberto Wolf

35. Cayan Dantas. TBD. Start: 2023. Thesis (M.Sc. in Mechanical Engineering) - UNICAMP, CAPES. Supervisor: William Roberto Wolf

36. Celina Morais Lima. Ciência de Dados no setor educacional privado: Uso de modelos de Churn com análise de risco de crédito de clientes para tornar as finanças mais eficientes - Aplicações a dados reais. Start: 2019. Thesis (Professional M.Sc. in Applied Mathematics, Statistics and Computing Applied to Industry) - ICMC - USP. Supervisor: Antonio Castelo Filho

37. César Ambrogi Ferreira do Lago. Otimizacao de Medidas Mitigadores da Drenagem Urbana usando Biorretencao. Start: 2016. Thesis (M.Sc. in Hydralic Engineering) - Departamento de Hidráulica e Saneamento Escola de Engenharia de São Carlos, CAPES. Supervisor: Eduardo Mario Mendiondo

38. Chiara Cotta e Titton. Desenvolvimento de métodos semi-empíricos para avaliação do efeito instalativo da hélice na aeronave aplicáveis às fases iniciais de projeto de uma aeronave. Start: 2023. Thesis (M.Sc. in Aeronautical and Mechanical Engineering) - ITA. Supervisor: Roberto Gil Annes da Silva

39. Claudio Sa Rodrigues de Lima. Estimação de valor de tempo de vida em redes complexas. Start: 2022. Thesis (M.Sc. in Statistics) - ICMC - USP. Supervisor: Thomas Kauê Dal'Maso Peron

40. Connor Davis Sterrett. Learning from COVID: A Credit-Risk Pandemic Playbook. Attributes Which Signal Risk of Default During a Pandemic. Start: 2020. Thesis (Professional M.Sc. in Applied Mathematics, Statistics and Computing Applied to Industry) - USP. Supervisor: Gleici da Silva Castro Perdoná

41. Cristhian Enrique Álvarez Pacheco. Levantamento experimental de perfis de fração de fase em escoamento bifásico líquido/gás-denso. Start: 2021. Thesis (M.Sc. in Mechanical Engineering) - USP - Escola de Engenharia de São Carlos, CNPq. Supervisor: Oscar Mauricio Hernandez Rodriguez

42. Cristóvão da Silva Rodrigues Costa. Análise de esforço cognitivo de estudantes em ambientes de aprendizagem multimídia usando características visuais da face. Start: 2023. Thesis (M.Sc. in Informática) - Universidade Federal de Alagoas. Co Supervisor: Diego Carvalho do Nascimento

43. Daniel Coutinho Ayub. Não Definido. Start: 2019. Thesis (Professional M.Sc. in Applied Mathematics, Statistics and Computing Applied to Industry) - USP. Supervisor: Francisco Louzada Neto

44. Daniel Shinoda Pascoal. Marketing Mix Modeling and Price Optimization for Online Retailers Using Machine Learning. Start: 2020. Thesis (Professional M.Sc. in Applied Mathematics, Statistics and Computing Applied to Industry) - ICMC - USP. Supervisor: Victor Claudio Bento de Camargo

45. David Melo da Luz. Machine learning e políticas públicas educacionais: utilização de robôs para auxiliar técnicos no planejamento de programas de formação à distância. Start: 2022. Thesis (Professional M.Sc. in Applied Mathematics, Statistics and Computing Applied to Industry) - ICMC - USP da USP. Supervisor: Jose Antonio Rabi

46. Débora Fonseca de Abreu Rangel. Abordando Fundamentos de Matemática no Ensino Médio,. Start: 2018. Thesis (Professional M.Sc. in Mathematics) - UNICAMP, CAPES. Supervisor: Lucio Tunes dos Santos

47. Débora Leandro de Andrade. Estudo do comportamento da dinâmica de voo de veículos com propulsão distribuída. Start: 2023. Thesis (M.Sc. in Aeronautical and Mechanical Engineering) - ITA. Supervisor: Roberto Gil Annes da Silva

48. Dérick Welman. A definir. Start: 2022. Thesis (M.Sc. in Electronic Engineering and Computing) - ITA. Supervisor: Ana Carolina Lorena

49. Diego Alecsander de Aguiar. Simulação numérica e aprendizado de máquina em escoamentos com interfaces móveis: impacto de gotas. Start: 2022. Thesis (M.Sc. in Computer Sciences) - UNESP. Supervisor: Cassio Machiaveli Oishi

50. Diego Jesus Talarico Ferreira. Análise morfológica de instrumentos musicais. Start: 2023. Thesis (M.Sc. in Statistics) - ICMC - USP. Supervisor: Thomas Kauê Dal'Maso Peron

51. Diego Yoshihiro Hono. O problema de empacotamento 2D em bin: uma abordagem combinando aprendizado de máquina e otimização. Start: 2022. Thesis (M.Sc. in Computer Sciences and Computational Mathematics) - USP, CNPq. Supervisor: Franklina Maria Bragion de Toledo

52. Douglas Luan de Souza. Sistema de Recomendação com Capacidade de Explicação. Start: 2021. Thesis (Professional M.Sc. in Electrical Engineering) - USP, Fundação da USP. Supervisor: Fabio Gagliardi Cozman

53. Eder Almeida Batista de Oliveira. Otimização evolutiva robusta em robôs móveis. Start: 2019. Thesis (M.Sc. in Applied Computing) - USP. Supervisor: Renato Tinós

54. edson luiz ferreira dos santos. Linear Response in Macroscopic fields. Start: 2020. Thesis (M.Sc. in Mathematics) - USP. Supervisor: Tiago Pereira da Silva

55. Eduardo da Silva Afonso. Explainable AI. Start: 2021. Thesis (M.Sc. in Applied Computing) - USP. Supervisor: Zhao Liang

56. Eduardo de Andrade Montez. Modelos Geoespaciais Aplicados à previsão e planejamento de demanda por produto e região geográfica no e-commerce. Start: 2022. Thesis (Professional M.Sc. in Applied Mathematics, Statistics and Computing Applied to Industry) - USP. Supervisor: Cibele Maria Russo Novelli

57. Eduardo Santos Carlos de Souza. Segmentação e Classificação de Terreno a Partir de Imagens Aéreas em Cenários com Poucos Recursos. Start: 2020. Thesis (M.Sc. in Computer Sciences and Computational Mathematics) - USP, CNPq. Supervisor: André Carlos Ponce de Leon Ferreira de Carvalho

58. Eduardo Soares Zanutti. A otimização de sortimento e de preços na indústria de moda rápida: uma abordagem de modelos lineares generalizados hierárquicos. Start: 2023. Thesis (Professional M.Sc. in Applied Mathematics, Statistics and Computing Applied to Industry) - ICMC - USP. Supervisor: Victor Claudio Bento de Camargo

59. Eleandro Santana Bernachi. Aproximação Numérica de Funções Transcendentes. Start: 2018. Thesis (Professional M.Sc. in Mathematics) - UNICAMP. Supervisor: Lucio Tunes dos Santos

60. Everton Vilhena Cardoso. Explorando blockchain para Internet Routing Registry. Start: 2022. Thesis (M.Sc. in Computer Sciences and Computational Mathematics) - USP, CAPES. Supervisor: Jó Ueyama

61. Fausto Marques Pinheiro Junior. Métodos Estatísticos em Geometria de Distâncias. Start: 2023. Thesis (Professional M.Sc.) - UNICAMP. Supervisor: Carlile Campos Lavor

62. Felipe Alves Siqueira. Deep Learning applied to Portuguese text data. Start: 2022. Thesis (Professional M.Sc. in Applied Mathematics, Statistics and Computing Applied to Industry) - USP, CAPES. Supervisor: André Carlos Ponce de Leon Ferreira de Carvalho

63. Felipe Antunes Calvi. Rede de sensores para monitoramento em tempo real da qualidade da água. Start: 2016. Thesis (M.Sc. in Physics) - UFSCar, CAPES. Supervisor: Filippo Ghiglieno

64. Felipe Augusto Arguello de Souza. Observatório Cidadão para a Segurança Hídrica. Start: 2017. Thesis (M.Sc. in Hydralic Engineering) - USP, CNPq. Supervisor: Eduardo Mario Mendiondo

65. Felipe Jordão Xavier. Aprendizado de máquina em dados de futebol. Start: 2021. Thesis (Professional M.Sc. in Computer Sciences and Computational Mathematics) - USP, CNPq. Supervisor: Francisco Aparecido Rodrigues

66. Felipe Marins Beloso. Tópicos Interdisciplinares de Matemática Geografia. Start: 2018. Thesis (Professional M.Sc. in Mathematics) - UNICAMP, CAPES. Supervisor: Lucio Tunes dos Santos

67. Fernanda Tostes Marana. Recommendation System Applying Cognitive Diagnostic Models to Predict User's Rating. Start: 2021. Thesis (Professional M.Sc. in Computer Sciences and Computational Mathematics) - ICMC - USP (USP, São Carlos), CAPES. Supervisor: Mariana Cúri

68. Gabriel Augusto Zutião. Preservando privacidade em ambiente de Internet das Coisas. Start: 2020. Thesis (M.Sc. in Computer Sciences and Computational Mathematics) - USP. Supervisor: Jó Ueyama

69. Gabriel Couto Tabak. Título a definir. Start: 2022. Thesis (Professional M.Sc. in Computer Sciences and Computational Mathematics) - ICMC - USP (USP, São Carlos). Supervisor: Mariana Cúri

70. Gabriel Gomes Ferreira. Avaliação da performance de métodos de estimação da AUC. Uma aplicação em dados de marketing digital. Start: 2019. Thesis (Professional M.Sc. in Applied Mathematics, Statistics and Computing Applied to Industry) - USP. Supervisor: Jorge Luis Bazan Guzman

71. Gabriel Lucas da Silva. Smoke animation. Start: 2021. Thesis (Professional M.Sc. in Applied Mathematics, Statistics and Computing Applied to Industry) - USP. Supervisor: Adriano Kamimura Suzuki

72. Gabriel Rodrigues Silva Grillo. Minimização parcialmente suave de funções não suaves e aplicações a problemas inversos lineares. Start: 2022. Thesis (M.Sc. in Applied Mathematics) - UNICAMP, FAPESP. Supervisor: Sandra Augusta Santos

73. Gabriel Souto Ferrante. a definir. Start: 2021. Thesis (M.Sc. in Computer Sciences and Computational Mathematics) - USP, CAPES. Supervisor: Rodolfo Ipolito Meneguette

74. Gabriel Tupinambá da Cunha Leandro. Previsão de Resultados de Partidas de Futebol: Uma Aplicação no Campeonato Brasileiro. Start: 2022. Thesis (M.Sc. in Statistics) - USP - ICMC. Supervisor: Adriano Kamimura Suzuki

75. Gabriela Nunes Martins. Um estudo do problema de designação de locais de armazenagem no contexto de e-commerce. Start: 2021. Thesis (M.Sc. in Operations Research) - UNIFESP. Supervisor: Mariá Cristina Vasconcelos Nascimento Rosset

76. Genicleito Carvalho Beltrão Gonçalves. Investigando a interpretabilidade de funções de pertinência fuzzy. Start: 2021. Thesis (Professional M.Sc. in Computer Sciences) - Universidade Federal da Bahia. Supervisor: Tatiane Nogueira Rios

77. George Anderson Alves dos Santos. Desenvolvimento de metodologias estatísticas para modelagem e monitoramento da degradação da performance de sistemas reparáveis. Start: 2023. Thesis (M.Sc. in Mathematics) - Universidade Federal da Bahia, Fundação de Amparo à Pesquisa do Estado da Bahia. Supervisor: Paulo Henrique Ferreira da Silva

78. Gibson De Marchi Poltronieri. Análise de Escoamentos Hipersônicos Reativos em Condições de Não Equilíbrio Termodinâmico. Start: 2022. Thesis (M.Sc. in Science and Space Technologies) - ITA, CAPES. Supervisor: Joao Luiz Filgueiras de Azevedo

79. Gilsiley Henrique Darú. Análise de dados aplicados à distribuição geográfica de redes de transporte. Start: 2021. Thesis (Professional M.Sc. in Applied Mathematics, Statistics and Computing Applied to Industry) - ICMC - USP. Supervisor: Antonio Castelo Filho

80. Giocani Candido. Modelos de aprendizado de máquina para a avaliação de aspectos da biodeterioração de árvores urbanas. Start: 2023. Thesis (M.Sc. in Computer Sciences) - UNESP, FAPESP. Supervisor: João Paulo Papa

81. Guilherme dos Santos Marcon. Abordagens Multilíngues para Análise de Sentimentos baseado em Aspectos. Start: 2021. Thesis (M.Sc. in Computer Sciences and Computational Mathematics) - USP, Fundação de Apoio à USP. Supervisor: Ricardo Marcondes Marcacini

82. Guilherme Mauri Faria da Cunha. Detecção automática de defeitos em processo de estampagem através da visão computacional. Start: 2023. Thesis (Professional M.Sc. in Applied Mathematics, Statistics and Computing Applied to Industry) - USP. Supervisor: Fabrício Simeoni de Sousa

83. Gustavo Contini Torres. Mineração de dados e aprendizado de máquina aplicados em uma operação de factoring para gestão eficiente do risco de crédito. Start: 2020. Thesis (Professional M.Sc. in Applied Mathematics, Statistics and Computing Applied to Industry) - ICMC - USP. Supervisor: Victor Claudio Bento de Camargo

84. Gustavo de Moura Souza. Aprendizado por Reforço em Processos Decisórios Markovianos aplicado em Jogos de Estratégia de Tempo Real. Start: 2021. Thesis (M.Sc. in Computer Sciences and Computational Mathematics) - USP. Supervisor: Claudio Fabiano Motta Toledo

85. Gustavo de Oliveira Aggio. Mapas ponto-conjunto: aspectos teóricos e aplicações a problemas de equilíbrio e teoria de jogos. Start: 2022. Thesis (M.Sc. in Applied Mathematics) - UNICAMP. Supervisor: Sandra Augusta Santos

86. Gustavo Freire. Otimização Multiobjetivo como estratégia para diminuição do tempo de resposta em aplicações de Internet das Coisas. Start: 2021. Thesis (Professional M.Sc. in Applied Mathematics, Statistics and Computing Applied to Industry) - Instituto de Ciencias Matematicas e de Computacao. Supervisor: Júlio Cézar Estrella

87. Gustavo Torquette. Revisiting instance hardness measures for classification problems. Start: 2021. Thesis (M.Sc. in Computer Sciences) - UNIFESP. Supervisor: Ana Carolina Lorena

88. HELDER JOSÉ BASTOS RAMOS. Um novo método de aprendizado federado com detecção de mudança de comportamento. Start: 2023. Thesis (M.Sc. in Computer Sciences) - Universidade Federal da Bahia. Supervisor: Ricardo Araújo Rios

89. Hellen Oliveira da Paz. Método de clusterização multinível para dados híbridos. Start: 2020. Thesis (M.Sc. in Mathematics) - Universidade Federal da Bahia. Supervisor: Anderson Luiz Ara Souza

90. Hericson dos Santos. a definir. Start: 2021. Thesis (M.Sc. in Computer Sciences and Computational Mathematics) - USP. Supervisor: Rodolfo Ipolito Meneguette

91. Herlisson Maciel Bezerra. Modelagem não-supervisionada de dados georreferenciados. Start: 2023. Thesis (M.Sc. in Statistics) - USP. Supervisor: Cibele Maria Russo Novelli

92. Humberto Prates. Fuzzy Large Language Models to improve interpretability of source code. Start: 2023. Thesis (M.Sc. in Computer Sciences) - Universidade Federal da Bahia. Supervisor: Tatiane Nogueira Rios

93. Igor Martinelli. Avaliação de dados de treinamento utilizando métricas de dinâmica do treinamento. Start: 2023. Thesis (Professional M.Sc. in Computer Sciences and Computational Mathematics) - USP. Supervisor: Moacir Antonelli Ponti

94. Igor Matsumoto. A definir. Start: 03/2021. Start: 2021. Thesis (Professional M.Sc. in Applied and Computing Mathematics) - UNESP. Co Supervisor: Edilaine Martins Soler

95. Ivalbert Pereira dos Santos. Aceleração dos modelos de vetores de suporte para dados massivos: métodos de seleção de vetores. Start: 2020. Thesis (M.Sc. in Mathematics) - Universidade Federal da Bahia. Supervisor: Anderson Luiz Ara Souza

96. Jadson Crislan Santos Costa. Open-set Spoofing Detection. Start: 2023. Thesis (Professional M.Sc.) - IC - UNICAMP, Griaule Biometrics. Supervisor: Anderson de Rezende Rocha

97. Jaqueline Lopes Dias. Aplicação de técnicas de aprendizado de máquina na identificação de beneficiários propensos ao desenvolvimento de doenças crônicas. Start: 2019. Thesis (Professional M.Sc. in Applied Mathematics, Statistics and Computing Applied to Industry) - ICMC - USP da USP. Supervisor: Jose Antonio Rabi

98. Joanna D'Arc Nogueira Veloso. Discretizações em malhas hierárquicas para métodos de decomposição de domínio multiescala. Start: 2018. Thesis (M.Sc. in Computer Sciences and Computational Mathematics) - USP. Supervisor: Fabrício Simeoni de Sousa

99. João Gabriel Campos. Corpus para Geração de Texto em Português. Start: 2020. Thesis (Professional M.Sc. in Electrical Engineering) - USP. Supervisor: Fabio Gagliardi Cozman

100. João Guilherme Pereira. Análise de signais EEG via redes complexas. Start: 2021. Thesis (M.Sc. in Applied Computing) - USP, FAPESP. Supervisor: Zhao Liang

101. João Matheus Siqueira Souza. Explorando a relação entre patrulhamento e crime. Start: 2022. Thesis (M.Sc. in Computer Sciences and Computational Mathematics) - ICMC - USP. Supervisor: Luis Gustavo Nonato

102. João Victor Duda do Amaral. Heurísticas para o Problema de Produção e Distribuição de Cartões de Crédito. Start: 2022. Thesis (Professional M.Sc. in Computer Sciences and Computational Mathematics) - USP/São Carlos, CNPq. Supervisor: Maristela Oliveira dos Santos

103. João Vitor Mariano Correia. Modelos de Linguagem Pré-treinados Enriquecidos aplicados a Recuperação da Informação. Start: 2023. Thesis (M.Sc. in Computer Sciences) - UNESP. Supervisor: João Paulo Papa

104. Jorge André D. Barreto. a definir. Start: 2021. Thesis (M.Sc. in Computer Sciences and Computational Mathematics) - USP. Supervisor: Rodolfo Ipolito Meneguette

105. Jorge Andres Piñero Delgadillo. Preliminary Study of the high-pressure behavior under the wing generated during Wing-In-Ground craft cruise flight.. Start: 2022. Thesis (M.Sc. in Aeronautical and Mechanical Engineering) - ITA. Supervisor: Roberto Gil Annes da Silva

106. Jorge Enrique Arrollo Caballero. Padrões de escoamento, fração volumétrica e gradiente de pressão em escoamento bifásico líquido/gás-denso em diversas inclinações. Start: 2021. Thesis (M.Sc. in Mechanical Engineering) - USP - Escola de Engenharia de São Carlos, CNPq. (Supervisor) Oscar Mauricio Hernandez Rodriguez

107. Jose Alberto Coretti. a definir. Start: 2021. Thesis (M.Sc. in Computer Sciences and Computational Mathematics) - USP. Supervisor: Rodolfo Ipolito Meneguette

108. Jose Alexandre Ferreira da Silva. Não Definido. Start: 2020. Thesis (Professional M.Sc. in Applied Mathematics, Statistics and Computing Applied to Industry) - USP. Supervisor: Francisco Louzada Neto

109. José Andrés Guzmán Morán. Processos epidêmicos não-Markovianos em redes complexas.. Start: 2022. Thesis (Professional M.Sc. in Computer Sciences and Computational Mathematics (ICMC)) - ICMC - USP, FAPESP. Supervisor: Francisco Aparecido Rodrigues

110. José Guilherme Santana de Sena. Modelos espaço-temporais aplicados no Controle Estatístico de Processo na presença de dados contínuos no intervalo unitário. Start: 2021. Thesis (M.Sc. in Mathematics) - Universidade Federal da Bahia, Fundação de Amparo à Pesquisa do Estado da Bahia. Supervisor: Paulo Henrique Ferreira da Silva

111. José Vitor Couventaris Sammour. Otimização de processo industrial em indústria moveleira (provisório). Start: 2020. Thesis (M.Sc. in Applied Mathematics) - UNICAMP, Fundação de Desenvolvimento da Unicamp. Co Supervisor: Paulo José da Silva e Silva

112. Josimara Cristina da Silva. Ensino de matemática e linguagem de sinais. Start: 2020. Thesis (Professional M.Sc. in Mathematics) - UNICAMP. Supervisor: Laura Leticia Ramos Rifo

113. Juan Sebastian Castano Franco. A definir. Start: 2023. Thesis (M.Sc. in Applied Mathematics) - USP, CNPq. Supervisor: Ernesto Julián Goldberg Birgin

114. Júlia Miquelete Vecchini. A definir. Start: 2023. Thesis (M.Sc. in Mathematics) - UNESP, CAPES. Supervisor: Maria do Socorro Nogueira Rangel

115. Juliana Shibaki Camargo. Uso de técnicas de aprendizado de máquina para combinar métodos de previsão. Start: 2020. Thesis (M.Sc. in Statistics) - Instituto de Ciências Matemática e de Computação. Co Supervisor: Marinho Gomes de Andrade Filho

116. Juliano Negri. Predição de medidas em redes complexas com aprendizagem de máquina. Start: 2021. Thesis (Professional M.Sc. in Computer Sciences and Computational Mathematics) - USP. Supervisor: Francisco Aparecido Rodrigues

117. Kennedy Bacule dos Santos. Aprendizagem profunda para dados de sobrevivência e genética. Start: 2021. Thesis (Professional M.Sc. in Computer Sciences and Computational Mathematics) - ICMC - USP (USP, São Carlos), CAPES. Supervisor: Mariana Cúri

118. Laleska Aparecida Ferreira Mesquita. Usando blockchain para rastreamento de extração de madeira. Start: 2020. Thesis (M.Sc. in Computer Sciences and Computational Mathematics) - USP. Supervisor: Jó Ueyama

119. Larissa Oliveira Moutinho da Silva. Propagação de rumores em redes com triângulos. Start: 2022. Thesis (M.Sc. in Statistics) - ICMC - USP. Supervisor: Thomas Kauê Dal'Maso Peron

120. Leandro Júnio de Oliveira Silva. TBD. Start: 2022. Thesis (Professional M.Sc. in Mechanical Engineering) - UNICAMP, FAPESP. Supervisor: William Roberto Wolf

121. Leandro Lima dos Santos. BRICOLAGEM E INOVATIVIDADE ORGANIZACIONAL COMO ANTECEDENTES DA INOVAÇÃO FRUGAL EM MERCADOS EMERGENTES E DESENVOLVIDOS. Start: 2018. Thesis (M.Sc. in Management) - Faculdade de Economia, Administração e Contabilidade - USP, CNPq. Supervisor: Moacir de Miranda Oliveira Junior

122. Lenz Jossue Lopez Lazaro. Estudo experimental do efejro de um ressalto na transiçaõ da camada limite. Start: 2023. Thesis (M.Sc. in Mechanical Engineering) - Escola de Engenharia de São Carlos USP, CAPES. Supervisor: Marcello Augusto Faraco de Medeiros

123. LEONARDO BAHIENSE LOPES. Desenvolvimento de uma nova arquitetura de GNN para modelagem de aminoácidos. Start: 2023. Thesis (M.Sc. in Computer Sciences) - Universidade Federal da Bahia. Supervisor: Ricardo Araújo Rios

124. Leonardo Pereira de Almeida Campos. Resolução do problema de Fluxo de Potência Ótimo Reativo com a incorporação de fontes renováveis de energia. Start: 08/2022. Start: 2022. Thesis (Professional M.Sc. in Electrical Engineering) - UNESP. Supervisor: Edilaine Martins Soler

125. Leticia Ferreira Reis. Não Definido. Start: 2021. Thesis (M.Sc. in Statistics) - USP. Supervisor: Francisco Louzada Neto

126. Lohan Rodrigues Narcizo Ferreira. Sistema de Recomendação Baseado em Modelo de Diagnóstico Cognitivo. Start: 2020. Thesis (Professional M.Sc. in Computer Sciences and Computational Mathematics) - ICMC - USP (USP, São Carlos). Supervisor: Mariana Cúri

127. Lucas Akio Senaga Onuki. Count Regression Models with alternative distributions.. Start: 2021. Thesis (M.Sc. in Statistics) - USP. Supervisor: Jorge Luis Bazan Guzman

128. Lucas Feitosa de Souza. Numerical investigation of an airfoil under light dynamic stall. Start: 2022. Thesis (M.Sc. in Mechanical Engineering) - UNICAMP, FAPESP. Supervisor: William Roberto Wolf

129. Lucas Julião. Tópicos em Logística - à definir. Start: 2022. Thesis (M.Sc. in Operations Research) - UNIFESP, CAPES. Supervisor: Luis Felipe Cesar da Rocha Bueno

130. Luis Felipe Borges de Messis. Modelo de Kuramoto em redes tridimensionais. Start: 2023. Thesis (M.Sc. in Statistics) - ICMC - USP, CAPES. Supervisor: Thomas Kauê Dal'Maso Peron

131. Luis Henrique Morelli. Arquiteturas Neurais Leves para a Classificação de Boletins Diários de Perfuração em Poços de Petróleo. Start: 2023. Thesis (M.Sc. in Computer Sciences) - UNESP, Petrobras. Supervisor: João Paulo Papa

132. Luísa Coelho Bolsoni. Modelos de Séries Temporais Financeiras com Técnicas de Ciência de Dados. Start: 2020. Thesis (Professional M.Sc. in Applied Mathematics, Statistics and Computing Applied to Industry) - Instituto de Ciências Matemática e de Computação. Supervisor: Marinho Gomes de Andrade Filho

133. Luiz Carlos Vendrame Junior. Utilização de algoritmos genéticos para definição de frete de retorno para transporte rodoviário no Porto de Santos. Start: 2023. Thesis (Professional M.Sc. in Applied Mathematics, Statistics and Computing Applied to Industry) - ICMC - USP. Supervisor: Victor Claudio Bento de Camargo

134. Luiz F. de A. Silva. Classificação politômica: Um algoritmo alternativo. Start: 2022. Thesis (M.Sc. in Statistics) - UFSCar, CAPES. Supervisor: Carlos Alberto Ribeiro Diniz

135. Luiz Fernando Dessoldi. SegmentAI: Sistema de Segmentação de Imagens via Inteligência Artificial. Start: 2023. Thesis (Professional M.Sc. in Computer Science) - UNESP, UNESP - Pró-Reitoria de Pós-Graduação. Supervisor: Wallace Correa de Oliveira Casaca

136. Luiz Fernando Merli de Oliveira Sementille. (a definir). Start: 2023. Thesis (M.Sc. in Computer Sciences) - UNESP, CAPES. Supervisor: João Paulo Papa

137. Luiz Guilherme Giordani. Data science. Start: 2021. Thesis (Professional M.Sc. in Applied Mathematics, Statistics and Computing Applied to Industry) - USP. Supervisor: Adriano Kamimura Suzuki

138. Luiz Gustavo Ribeiro. Desenvolvendo um modelo para reconhecimento de produtos de varejo usando visão computacional e Machine Learning. Start: 2020. Thesis (Professional M.Sc. in Applied Mathematics, Statistics and Computing Applied to Industry) - USP. Supervisor: Fabrício Simeoni de Sousa

139. Luiza Torello Vieira. Geração procedural de missões adaptadas a perfis de jogadores. Start: 2022. Thesis (M.Sc. in Computer Sciences and Computational Mathematics) - USP. Supervisor: Claudio Fabiano Motta Toledo

140. Luna Wagner Cunha. Análise comparativa de métodos de seleção de variáveis em problemas de classificação. Start: 2022. Thesis (M.Sc. in Statistics) - USP. Supervisor: Cibele Maria Russo Novelli

141. Maicon Centner Germano. Otimização. Start: 2023. Thesis (M.Sc. in Biometry) - UNESP. Supervisor: Helenice de Oliveira Florentino Silva

142. Marcos Menon José. Aprendizado por Reforço em Chatbot sobre a Amazônia Azul. Start: 2020. Thesis (Professional M.Sc. in Electrical Engineering) - USP, Fundação da USP. Supervisor: Fabio Gagliardi Cozman

143. Marcos Valesi. A definir. Start: 2022. Thesis (M.Sc) - Universidade Federal do Paraná. Supervisor: Anderson Luiz Ara Souza

144. Maria Luiza Teixeira Santos. Uma abordagem do problema de distribuição em um contexto de e-commerce. Start: 2022. Thesis (M.Sc. in Computer Sciences and Computational Mathematics) - USP, FAPESP. Supervisor: Franklina Maria Bragion de Toledo

145. Maria Luiza Teixeira Santos.. Uma abordagem do problema de distribuição em um contexto de e-commerce. Start: 2022. Thesis (Professional M.Sc. in Computer Sciences and Computational Mathematics) - USP, FAPESP. Co Supervisor: Mariá Cristina Vasconcelos Nascimento Rosset

146. Mario Muramatsu Junior. a ser definicido. Start: 2021. Thesis (Professional M.Sc. in Computer Science) - USP. Supervisor: André Fujita

147. Mateus Iuri Melo Popoff. A definir. Start: 2022. Thesis (M.Sc. in Computer Sciences and Computational Mathematics) - USP, FAPESP. Supervisor: Livia Souza Freire Grion

148. Mateus Leonel Souto Alonso. Algoritmos de otimização qualidade-diversidade para o problema de escalonamento em enfermagem. Start: 2022. Thesis (M.Sc. in Applied Computing) - USP. Supervisor: Renato Tinós

149. Matheus Correia Lindino. Anxiety Detection through Machine Learning Techniques. Start: 2022. Thesis (Professional M.Sc.) - IC - UNICAMP, Samsung Eletrônica da Amazônia. Supervisor: Anderson de Rezende Rocha

150. Matheus de Túlio. Caracterização e análise de redes de expressão gênica. Start: 2023. Thesis (M.Sc. in Statistics) - ICMC - USP. Supervisor: Thomas Kauê Dal'Maso Peron

151. Matheus Diniz Ferreira. Otimização da cadeia de suprimentos utilizando Big Data. Start: 2020. Thesis (Professional M.Sc. in Applied Mathematics, Statistics and Computing Applied to Industry) - USP. Supervisor: Maristela Oliveira dos Santos

152. Matheus Henrique Junqueira Saldanha. A definir. Start: 2021. Thesis (M.Sc. in Statistics) - USP - ICMC, CAPES. Supervisor: Adriano Kamimura Suzuki

153. Matheus Melo Monteverde. Métodos de Ajuste de Modelo DLM para altos números de Mach. Start: 2022. Thesis (Professional M.Sc. in Aeronautical and Mechanical Engineering) - ITA. Supervisor: Roberto Gil Annes da Silva

154. Matheus Pereira Leal. A definir. Start: 2021. Thesis (M.Sc. in Computer Sciences) - UNESP. Supervisor: Rodolfo Ipolito Meneguette

155. Maximilian Serguei Mesquita. Ciência de dados em ações preditivas de falhas e na otimização de processos em plantas petroquímicas. Start: 2022. Thesis (Professional M.Sc. in Applied Mathematics, Statistics and Computing Applied to Industry) - USP. Supervisor: Fabrício Simeoni de Sousa

156. Michel de Oliveira Guijarro. Análise de Influências e Mineração de Dados para Detecção de Beneficiário Final e Combate à Lavagem de Dinheiro, Redirecionados a Pessoas Expostas Politicamente (PEP).. Start: 2022. Thesis (Professional M.Sc. in Applied Mathematics, Statistics and Computing Applied to Industry) - USP. Supervisor: Claudio Fabiano Motta Toledo

157. Michelangelo Redondo dos Anjos. Interpretabilidade, Performance e Estabilidade: Bagging e Boosting Aplicadas ao Risco de Crédito. Start: 2023. Thesis (Professional M.Sc. in Applied Mathematics, Statistics and Computing Applied to Industry) - USP. Supervisor: Cibele Maria Russo Novelli

158. Naiara Pereira Magro Faccioli. Auditoria de Enfermagem X Pandemia: o impacto financeiro nas contas hospitalares de um hospital referência no tratamento de pacientes com Covid-19 na cidade de Ribeirão Preto. Start: 2021. Thesis (M.Sc. in Community Health) - Faculdade de Medicina de Ribeirão Preto. Supervisor: Gleici da Silva Castro Perdoná

159. Natalia da Silva Rodrigues. Otimização de processo industrial em indústria moveleira (provisório). Start: 2020. Thesis (M.Sc. in Applied Mathematics) - UNICAMP, Fundação de Desenvolvimento da Unicamp. Co Supervisor: Paulo José da Silva e Silva

160. Nicole do Vale Dalarmelina. Uma abordagem Ensemble Learning para modelos de detecção de intrusão para redes industriais. Start: 2020. Thesis (Professional M.Sc. in Computer Sciences and Computational Mathematics) - USP. Supervisor: Rodolfo Ipolito Meneguette

161. Nikolaj Angel Peter Even. Unsteady Aerodynamic Modeling of Electric Motor Driven Propellers. Start: 2022. Thesis (M.Sc. in Aeronautical and Mechanical Engineering) - ITA. Supervisor: Roberto Gil Annes da Silva

162. Osvaldo Teodoro da Silva Neto. A definir. Start: 2023. Thesis (Professional M.Sc. in Mathematics) - UNESP, CAPES. Supervisor: Silvio Alexandre de Araujo

163. Patricia Bruniero Franciscato Augusto. Análise de descalculia via redes complexas. Start: 2020. Thesis (M.Sc. in Applied Computing) - USP. Supervisor: Zhao Liang

164. Paula Jaíne Alves da Silva. Aplicação de técnicas de Deep Learning em microfluidica. Start: 2020. Thesis (M.Sc. in Computer Sciences and Computational Mathematics) - Instituto de Ciencias matematicas e de computação, Univ. São Paulo, CAPES. Supervisor: Roberto Federico Ausas

165. Pedro Lamkowski dos Santos. Modelos de Atenção Visual Baseados em Técnicas de Análises de Vídeos no Domínio Comprimido. Start: 2021. Thesis (M.Sc. in Computer Sciences) - UNESP, FAPESP. Supervisor: João Paulo Papa

166. Pedro Otavio de Souza Mussatto. Condições de otimalidade para problemas de controle impulsivo. Start: 2022. Thesis (M.Sc. in Mathematics) - UNESP. Supervisor: Geraldo Nunes Silva

167. Percy Eduardo Palma Chavez. Organizational Information Security Adaptative Model. Start: 2022. Thesis (Professional M.Sc. in Computer Sciences and Computational Mathematics) - ICMC - USP (USP, São Carlos). Supervisor: Mariana Cúri

168. Philipe Dias de Almeida. Maximização de vendas em Marketplace atrevés de cash-back. Start: 2020. Thesis (Professional M.Sc. in Applied Mathematics, Statistics and Computing Applied to Industry) - USP. Supervisor: Gleici da Silva Castro Perdoná

169. Priscila Gutierres. Sistema de apoio a tratamento para reabilitação motora de membro superior baseado em Realidade Virtual imersiva. Start: 2021. Thesis (M.Sc. in Computer Sciences and Computational Mathematics) - USP. Supervisor: Claudio Fabiano Motta Toledo

170. Públio Netto de Almeida. A definir. Start: 2022. Thesis (M.Sc. in Operations Research) - UNIFESP. Supervisor: Ana Carolina Lorena

171. Quinhones Furtunato de Souza Dutra. PROBLEMA DE ROTEIRIZAÇÃO DE VEÍCULOS COM FROTA FIXA, HETEROGÊNEA, JANELAS DE TEMPO, ENTREGAS FRACIONADAS E RESTRIÇÃO DE ACESSO. Start: 2018. Thesis (M.Sc. in Production Engineering) - USP. Supervisor: Débora Pretti Ronconi

172. Rafael dos Santos Braz. Verificação da Transformadores de Código. Start: 2020. Thesis (Professional M.Sc. in Applied Mathematics, Statistics and Computing Applied to Industry) - USP, CAPES. Supervisor: Adenilso da Silva Simão

173. Rafael Gardel Azzariti Brasil. Resolução de problemas de Engenharia de Produção através de métodos de otimização (título provisório).. Start: 2020. Thesis (M.Sc. in Production Engineering) - USP. Supervisor: Débora Pretti Ronconi

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176. Rafael Pereira de Avila Ferrari. OTIMIZAÇÃO DE MALHA LOGÍSTICA ATRAVÉS DE MODELOS DE LOCALIZAÇÃO DE FACILIDADES.. Start: 2022. Thesis (Professional M.Sc. in Applied Mathematics, Statistics and Computing Applied to Industry) - USP. Supervisor: Maristela Oliveira dos Santos

177. Ranielly Aparecida da Silva. Aplicação de Técnicas de Ciência de Dados na Análise de Dados Públicos do Ministério da Saúde. Start: 2023. Thesis (M.Sc. in Mathematics) - UNESP, CAPES. Supervisor: Wallace Correa de Oliveira Casaca

178. Ravelly Carvalho Zanatta. Explorando a privacidade no consenso de Proof-of-Learning: um estudo de caso na area médica. Start: 2022. Thesis (M.Sc. in Computer Sciences and Computational Mathematics) - USP, CAPES. Supervisor: Jó Ueyama

179. Rayssa Freitas Carvalho. Self-Paced Curriculum Learning em Redes Neurais Artificiais. Start: 2023. Thesis (M.Sc. in Electronic Engineering and Computing) - ITA. Supervisor: Ana Carolina Lorena

180. Renan de Oliveira da Cruz. a definir. Start: 2022. Thesis (M.Sc. in Statistics) - USP - ICMC. Supervisor: Adriano Kamimura Suzuki

181. Ricardo Tetti Camacho. Processos dinâmicos em redes de agentes móveis. Start: 2022. Thesis (Professional M.Sc. in Computer Sciences and Computational Mathematics (ICMC)) - ICMC - USP, FAPESP. Supervisor: Francisco Aparecido Rodrigues

182. Richard G. dos Santos. Gradient boosting modificado. Start: 2022. Thesis (M.Sc. in Statistics) - UFS-Car. Supervisor: Carlos Alberto Ribeiro Diniz

183. Rodrigo Fernando Murça Barroso. Uso da distribuição Inversa na modelagem de dados de sobre-vivência. Start: 2021. Thesis (M.Sc. in Statistics) - Instituto de Ciências Matemática e Computação-USP. Supervisor: Vicente Garibay Cancho

184. Rodrigo La Scalea. EMERITUS - Real time indoor location system with absolute coordinates. Start: 2016. Thesis (M.Sc. in Computer Sciences and Computational Mathematics) - ICMC - USP, CNPq. Supervisor: Kalinka Regina Lucas Jaquie Castelo Branco

185. Rodrigo Tanaka Aki. Development of an agent framework for the game ?Don?t Starve?. Start: 2023. Thesis (M.Sc. in Electronic Engineering and Computing) - ITA. Supervisor: Mariá Cristina Vasconcelos Nascimento Rosset

186. Ronaldo Lopes Inocêncio Júnior. MÉTODO HEURÍSTICO DE SOBRE-AMOSTRAGEM MINORITÁRIA PARA MITIGAR O PROBLEMA DE SAMPLING BIAS. Start: 2021. Thesis (M.Sc. in Electronic Engineering and Computing) - ITA. Supervisor: Ana Carolina Lorena

187. Rosemeire do Nascimento Santos. A definir. Start: 2022. Thesis (M.Sc. in Mathematics) - Universidade Federal da Bahia, Fundação de Amparo à Pesquisa do Estado da Bahia. Supervisor: Paulo Henrique Ferreira da Silva

188. Rubens Takeji Aoki Araujo Martins. Quantificação de recarga em aquíferos livres. Start: 2020. Thesis (M.Sc. in Hydraulic Engineering) - USP, CAPES. Supervisor: Edson Cezar Wendland

189. Samuel Ferreira Guimarães Santos. Logistica Social - Transporte de Pessoas. Start: 2020. Thesis (M.Sc. in Computer Sciences and Computational Mathematics) - Instituto de Ciências Matemátcias e de Computação, CAPES. Supervisor: Franklina Maria Bragion de Toledo

190. Sofia de Almeida Prado Simanke. (a definir). Start: 2021. Thesis (M.Sc. in Computer Sciences and Computational Mathematics) - USP. Supervisor: Seiji Isotani

191. Suede Santos Barbosa. A definir. Start: 2020. Thesis (M.Sc. in Mathematics) - Universidade Federal da Bahia. Supervisor: Paulo Henrique Ferreira da Silva

192. Suzana de Lima Santos da Silva. A definir. Start: 2021. Thesis (M.Sc. in Mathematics) - Universidade Federal da Bahia. Co Supervisor: Anderson Luiz Ara Souza

193. Tamires Brito da Silva. Recomendação de algoritmos de segmentação de imagens para dados de câncer. Start: 2019. Thesis (Professional M.Sc. in Applied Mathematics, Statistics and Computing Applied to Industry) - USP, CAPES. Supervisor: André Carlos Ponce de Leon Ferreira de Carvalho

194. Teh Led Red. Modelagem via redes neurais de dados de sobrevivência de longa duração com dispersão não observada. Start: 2020. Thesis (M.Sc. in Statistics) - Instituto de Ciências Matemática e Computação-USP. Supervisor: Vicente Garibay Cancho

195. Thales Castelo Branco. TBD. Start: 2022. Thesis (M.Sc. in Mechanical Engineering) - UNICAMP. Supervisor: William Roberto Wolf

196. Thiago Felipe Castro Carrenho. Métodos numéricos para o sistema de águas rasas acoplado à equação de Exner. Start: 2022. Thesis (Professional M.Sc. in Applies Mathematics) - UNICAMP, FAPESP. Supervisor: Maicon Ribeiro Correa

197. Tiago Chaiveri da Costa. Desenvolvimento de softwares para avaliação de atividades físicas em gestantes no SUS. Start: 2022. Thesis (M.Sc. in Public Health) - Faculdade de Medicina de Ribeirão Preto, CAPES. Supervisor: Gleici da Silva Castro Perdoná

198. Victor Akihito Kamada Tomita. Modelos de aprendizagem profunda para mineração de opinião. Start: 2022. Thesis (M.Sc. in Computer Sciences and Computational Mathematics) - USP. Supervisor: Ricardo Marcondes Marcacini

199. Victor Chavauty Villela. a ser definido. Start: 2021. Thesis (Professional M.Sc.) - USP. Supervisor: André Fujita

200. Victor de Sá Nunes. Medição da dificuldade de cada instância em problemas de regressão. Start: 2023. Thesis (Professional M.Sc. in Operations Research) - UNIFESP. Supervisor: Ana Carolina Lorena

201. Victor Eduardo Lachos Olivares. Novos desenvolvimentos em modelos mistos para resposta limitada. Start: 2022. Thesis (M.Sc. in Statistics) - USP. Supervisor: Jorge Luis Bazan Guzman

202. Vinicius Alencar Oliveira. Uso de redes complexas e espaço de fases para detecção de tendências em séries temporais. Start: 2021. Thesis (M.Sc.) - USP. Supervisor: Marcelo de Souza Lauretto

203. Vinícyus Araújo Brasil. Q-SVR: APRENDIZADO POR REFORÇO VIA APROXIMAÇÃO DA FUNÇÃO AÇÃO-VALOR COM MÁQUINAS DE VETORES SUPORTE COM MÚLTIPLAS SAÍDAS. Start: 2021. Thesis (M.Sc.) - Universidade Federal do Paraná. Supervisor: Anderson Luiz Ara Souza

204. Vitor Correa Yoshida. A definir. Start: 2022. Thesis (Professional M.Sc. in Applied Mathematics, Statistics and Computing Applied to Industry) - USP - ICMC. Supervisor: Adriano Kamimura Suzuki

205. Vittoria de Paula. Otimização de Relações Empresariais e Clientes no E-commerce: Mensuração e Impacto das Estratégias de Branding. Start: 2023. Thesis (Professional M.Sc. in Applied Mathematics, Statistics and Computing Applied to Industry) - USP. Supervisor: Cibele Maria Russo Novelli

206. Viviane Alves Moreira. Modelos para previsão de rentabilidade baseados em aprendizado supervisionado em uma empresa de serviços financeiros. Start: 2018. Thesis (Professional M.Sc. in Applied Mathematics, Statistics and Computing Applied to Industry) - ICMC - USP. Supervisor: Antonio Castelo Filho

207. Wellington Yuanhe Zhao. Análise de diagnóstico em modelos para dados de contagem. Start: 2021. Thesis (M.Sc. in Statistics) - USP. Supervisor: Cibele Maria Russo Novelli

208. Wilker Duarte Teixeira. PROBLEMA DE ROTEIRIZAÇÃO DE VEÍCULOS COM FROTA FIXA. Start: 2020. Thesis (M.Sc. in Production Engineering) - USP. Co Supervisor: Débora Pretti Ronconi

209. Yuri M. Mizusawa. Math-heurísticas para Problemas de Otimização. Start: 2021. Thesis (M.Sc. in Computer Sciences and Computational Mathematics) - Instituto de Ciências Matemátcias e de Computação. Supervisor: Franklina Maria Bragion de Toledo

A.4   COMPLETED M.Sc.

1. ADRIANO HENRIQUE CANTAO (Mestrado). Ranqueamento de atributos por meio de Random Forests e Redes Complexas. 2022. Thesis (M.Sc. in Applied Computing) - USP, CAPES. CoSupervisor: Zhao Liang.

2. Alysson Matos de Souza. Álgebra Geométrica Conforme aplicada à atualização de estruturas 3D de proteínas. 2022. Thesis (M.Sc. in Applied Mathematics) - UNICAMP, CAPES. Supervisor: Carlile Campos Lavor.

3. Alysson Matos de Souza. Álgebra Geométrica Conforme aplicada à atualização de estruturas 3D de proteínas. 2022. Thesis (M.Sc. in Applied Mathematics) - UNICAMP, CAPES. Supervisor: Carlile Campos Lavor.

4. Amanda Gomes Vetorazzi. Estudos de métodos do tipo Jacobi para problemas de Equilíbrio de Nash.. 2022. Thesis (M.Sc. in Operations Research) - UNIFESP, CAPES. Supervisor: Luís Felipe Cesar da Rocha Bueno.

5. Ana Carolina Rodrigues. Avaliação de representações embeddings na tarefa de similaridade sentencial. 2023. Thesis (M.Sc. in Computer Sciences and Computational Mathematics) - USP, CAPES. Supervisor: Ricardo Marcondes Marcacini.

6. Ana Cláudia Piau. Explorando Alguns Conceitos da Matemática Babilônica e Aplicando na Educação Contemporânea. 2023. Thesis (Professional M.Sc. in Mathematics) - UNICAMP, . Supervisor: Lúcio Tunes dos Santos.

7. Ana Cristina Neves Carloni. Aeroelastic Analysis of Transonic Flutter with CFD-Based Reduced-Order Models. 2023. Thesis (M.Sc. in Science and Space Technologies) - ITA, FAPESP. Supervisor: Joao Luiz Filgueiras de Azevedo.

8. Ana Elisa Basilio de Carvalho. Simulação numérica direta compressível de ondas Tollmien-Schlichting e Wave Packets interagindo com rugosidades 2D isoladas. 2022. Thesis (M.Sc. in Mechanical Engineering) - Escola de Engenharia de São Carlos USP, CAPES. Supervisor: Marcello Augusto Faraco de Medeiros.

9. Ana Paula Yoshinaga. "Matemática Financeira No Ensino Médio ? Uma Proposta Para Sala De Aula. 2023. Thesis (M.Sc. in Mathematics) - UNICAMP, . Supervisor: Roberto Andreani.

10. André Advíncula Osório. INVESTIGATION OF AIRCRAFT WING ROCK MOTION USING SYSTEM IDENTIFICATION METHODS. 2023. Thesis (M.Sc. in Aeronautical and Mechanical Engineering) - ITA, . Supervisor: Roberto Gil Annes da Silva.

11. Antônio Ronaldo da Silva. Mineração de Textos usando Word Embeddings com Contexto Geográfico. 2022. Thesis (M.Sc. in Computer Sciences) - Universidade Federal de Mato Grosso do Sul, . Supervisor: Ricardo Marcondes Marcacini.

12. Augustin Masson. Ice Accretion on swept back wings. 2022. Thesis (M.Sc. in Aeronautical and Mechanical Engineering) - ITA, . Supervisor: Roberto Gil Annes da Silva.

13. Bernardo Mota Barbosa. Sistemas de recomendação para priorização de tarefas realizadas por representantes de negócio. 2023. Thesis (M.Sc. in Computer Sciences and Computational Mathematics) - ICMC - USP, . Supervisor: Luis Gustavo Nonato.

14. Bryan Lucas Gonçalves dos Santos. CONTENT-BASED IMAGE RETRIEVAL (CBIR) FOR BOAT RECOGNITION. 2023. Thesis (M.Sc. in Aeronautical and Mechanical Engineering) - ITA, . Supervisor: Ana Carolina Lorena.

15. Caroline Amantéa Stella. Um estudo dos modelos de sobrevivência de longa duração LIGcr e GEPGWcr. 2022. Thesis (M.Sc. in Statistics) - USP - ICMC, . Supervisor: Adriano Kamimura Suzuki.

16. Daniel Augusto dos Santos. Um modelo para explicação de decisões locais de classificadores baseado em algoritmos genéticos com preservação da diversidade de populações. 2022. Thesis (M.Sc. in Applied Computing) - USP, . Supervisor: Renato Tinós.

17. Dimary del Carmen Moreno López. Globalização com condições não monótonas e informações de multiplicadores de Lagrange. 2023. Thesis (M.Sc. in Applied Mathematics) - UNIFESP, FAPESP. Supervisor: Luís Felipe Cesar da Rocha Bueno.

18. Elizabeth Alejandra Ortiz Durán. Implementación del álgebra geométrica conforme en mathematica y su aplicación al problema de la geometria de distancias. 2023. Thesis (M.Sc. in Mathematics) - Universidad Nacional Autónoma de Mexico, . CoSupervisor: Carlile Campos Lavor.

19. Erivelton Souza Antonio. Detecção de oportunidades para aproveitamento dos recursos de produção a partir do mapeamento, previsão e visualização de dados. 2022. Thesis (Professional M.Sc. in Applied Mathematics, Statistics and Computing Applied to Industry) - USP, . Supervisor: Maristela Oliveira dos Santos.

20. Euclydes Nasorri Gottsfritz. RAPTOR: Um Algoritmo Meta-heurístico para Alocação de Recursos em Computação de Borda Veicular. 2023. Thesis (M.Sc. in Computer Sciences) - UNESP, . Supervisor: Rodolfo Ipolito Meneguette.

21. Fernanda Tostes Marana. A Cognitive Diagnosis Approach for Recommending Items Based on Polytomous Responses. 2023. Thesis (M.Sc. in Computer Sciences and Computational Mathematics) - USP, CAPES. CoSupervisor: André Carlos Ponce de Leon Ferreira de Carvalho.

22. Fernando Pontes Baixo. Avaliação do Modelo de Variação Total no Retoque de Feições Cartográficas. 2022. Thesis (M.Sc.) - UNESP, CAPES. CoSupervisor: Wallace Correa de Oliveira Casaca.

23. Frederico de Castro Neto. Implementação da Heurística de Lin-Kernighan e sua Aplicação no Sequenciamento de Pontos de Rebitagem. 2023. Thesis (M.Sc. in Production Engineering) - UNESP, . Supervisor: Edilaine Martins Soler.

24. Gabriel Biscaro Cavallari. Estudo de representações de imagens de múltiplos domínios a partir de aprendizado profundo não supervisionado e semi-supervisionado. 2022. Thesis (M.Sc. in Computer Sciences and Computational Mathematics) - USP, FAPESP. Supervisor: Moacir Antonelli Ponti.

25. Gabriel Gazetta de Araujo. Black-box interpretability techniques assessment: a framework. 2022. Thesis (M.Sc. in Computer Sciences and Computational Mathematics) - ICMC - USP, . Supervisor: Luis Gustavo Nonato.

26. Gabriel Lino Garcia. Detecção de Fake News Utilizando Aprendizado de Máquina. 2022. Thesis (M.Sc. in Computer Sciences) - UNESP, . Supervisor: João Paulo Papa.

27. Gabriel Rodrigues Félix. mpactos da Formação de Gelo no Desempenho de Hélices. 2022. Thesis (M.Sc. in Aeronautical and Mechanical Engineering) - ITA, CAPES. Supervisor: Roberto Gil Annes da Silva.

28. Giseli Pulgrossi. "Lixo urbano, consumo e sustentabilidade-reflexões no espaço escolar com auxílios de TICs. 2022. Thesis (M.Sc.) - Escola de Engenharia de São Carlos, . Supervisor: Kalinka Regina Lucas Jaquie Castelo Branco.

29. Guilherme Jayme Allan Pimentel. System Safety Analysis of a Subsonic Wind Tunnel. 2022. Thesis (M.Sc. in Science and Space Technologies) - ITA, CAPES. Supervisor: Joao Luiz Filgueiras de Azevedo.

30. Gustavo Henrique Nunes. Usando Medidas de Dificuldade de Instâncias em Curriculum Learning. 2023. Thesis (M.Sc. in Computer Sciences) - UNIFESP, . Supervisor: Ana Carolina Lorena.

31. Jheovany Henrique Martins Pereira. Análise de resoluções de problemas por alunos em treinamento para Olimpíadas de Matemática. 2022. Thesis (M.Sc. in Mathematics) - UNICAMP, . Supervisor: Laura Leticia Ramos Rifo.

32. João de Barro Monteiro Cavalcanti. CONCEPTUAL DESIGN OF HYPERSONIC VEHICLE CONSIDERING AEROELASTIC FEATURES. 2022. Thesis (M.Sc. in Aeronautical and Mechanical Engineering) - ITA, . Supervisor: Roberto Gil Annes da Silva.

33. João Luiz Santos Gomes. Noções distintas de posto para tensores e implicações práticas em problemas de completamento. 2023. Thesis (M.Sc. in Applied Mathematics) - UNICAMP, CAPES. Supervisor: Sandra Augusta Santos.

34. Lucas Thomaz Januário Pinto. Modelos Matemáticos para Redução de Custos com Manufatura e Distribuição de Cartões de Crédito DEFESA 2022. 2022. Thesis (Professional M.Sc. in Applied Mathematics, Statistics and Computing Applied to Industry) - USP, . Supervisor: Maristela Oliveira dos Santos.

35. Luis Eduardo Bertotto. Investigação da umidade do solo por meio da combinação entre o aquecimento de uma liga ferrítica (Fe-Cr-Al) e a medição distribuída de temperatura (DTS). 2023. Thesis (M.Sc. in Hydraulic Engineering) - USP, CNPq. Supervisor: Edson Cezar Wendland.

36. Luiz Augusto Vieira Manoel. Reduzindo viés em classificação de tons de pele em bases de dados de imagens. 2022. Thesis (M.Sc. in Computer Sciences and Computational Mathematics) - USP, CAPES. Supervisor: Moacir Antonelli Ponti.

37. Luiz Felipe Casali Migliato. Predição de Deságios em Leilões de Transmissão da ANEEL com o Uso de Inteligência Artificial Interpretável. 2022. Thesis (Professional M.Sc. in Applied Mathematics, Statistics and Computing Applied to Industry)) - USP, . Supervisor: André Carlos Ponce de Leon Ferreira de Carvalho.

38. Maíra Baptista de Almeida. Artificial Immune System Approach for an Intrusion Detection System for the Internet of Things. 2022. Thesis (M.Sc. in Computer Sciences) - UNIFESP, CAPES. CoSupervisor: André Carlos Ponce de Leon Ferreira de Carvalho.

39. Marcos Paulo Silva Gôlo. Variational Autoencoder Multimodal para Representação de Textos na Classificação baseada em uma Única Classe. 2022. Thesis (M.Sc. in Computer Sciences and Computational Mathematics) - USP, CNPq. Supervisor: Ricardo Marcondes Marcacini.

40. Miguel Sebastián Concha Aracena. Latin America's economic dependence: An statistical look through multivariate information. 2022. Thesis (M.Sc. in Statistics) - Universidad de Atacama, . Supervisor: Diego Carvalho do Nascimento.

41. Paula Cristina Rohr Ertel. Uma abordagem contínua para o problema do caixeiro viajante. 2023. Thesis (M.Sc. in Applied Mathematics) - USP, CAPES. Supervisor: Ernesto Julián Goldberg Birgin.

42. Paulo Henrique Lima de Paula. Detecção e Análise de Comunidades de Redes Cerebrais em Acidentes Vascular Cerebral (AVC). 2022. Thesis (M.Sc. in Applied Computing) - USP, . Supervisor: Zhao Liang.

43. Paulo Ricardo Viviurka do Carmo. Embedding Propagation over Heterogeneous Information Networks. 2022. Thesis (M.Sc. in Computer Sciences) - USP, . Supervisor: Ricardo Marcondes Marcacini.

44. Pedro Henrique Rosa dos Santos. Numerical simulation of the receptivity of Tollmien-Schilichting waves due to acoustic waves inciding on rectangular hump and gap in compressible flow,. 2022. Thesis (M.Sc. in Mechanical Engineering) - Escola de Engenharia de São Carlos USP, . Supervisor: Marcello Augusto Faraco de Medeiros.

45. Pedro Paiola. Sumarização Abstrativa de Textos em Português Utilizando Aprendizado de Máquina. 2022. Thesis (M.Sc. in Computer Sciences) - UNESP, CAPES. Supervisor: João Paulo Papa.

46. Rafael Ajudarte de Campos. Roteamento de aeronaves sob incertezas via otimização robusta. 2022. Thesis (M.Sc. in Production Engineering) - UFSCar, FAPESP. Supervisor: Pedro Augusto Munari Junior.

47. Rafael Belmiro Cristovão. Detecção de fraudes em cartão de crédito: um caso de uso de modelos supervisionados no e-commerce brasileiro. 2023. Thesis (Professional M.Sc. in Applied Mathematics, Statistics and Computing Applied to Industry) - ICMC - USP, . Supervisor: Gustavo Carlos Buscaglia.

48. Rafael da Silva Alves. THEORETICAL FATIGUE METHODOLOGY IN AERONAUTICAL PANELS ON POST-BUCKLING REGIME DUE TO AEROELASTIC EFFECTS IN SUPERSONIC FLOW. 2022. Thesis (M.Sc. in Aeronautical and Mechanical Engineering) - ITA, . Supervisor: Roberto Gil Annes da Silva.

49. Rafael Pavan. Método híbrido de enxame de partículas de aprendizagem abrangente com branch-and-bound e programação quadrática sequencial para resolução de problemas do fluxo de potência ótimo com variáveis discretas. Start: 03/2021. 2023. Thesis (M.Sc. in Eletrical Engineering) - UNESP, CNPq. Supervisor: Edilaine Martins Soler.

50. Rafael Peçanha Weissman. Métodos de alocação fortuita: Extensão para múltiplos grupos e sua avaliação empírica. 2022. Thesis (M.Sc.) - USP, . Supervisor: Marcelo de Souza Lauretto.

51. Rameyli Godoi. Implementação de Modelos Viscoelásticos com Viscosidade Variável no Sistema HiGFlow. 2022. Thesis (M.Sc. in Computer Sciences and Computational Mathematics) - ICMC - USP, CNPq. Supervisor: Antonio Castelo Filho.

52. Renan Santos. High-Order Conservative Interpolation on Overset Meshes for Unsteady Aerodynamics Applications. 2022. Thesis (M.Sc. in Science and Space Technologies) - ITA, . Supervisor: Joao Luiz Filgueiras de Azevedo.

53. Robert Rafael. ANÁLISE DA DINÂMICA DE VOO DE UM VEÍCULO ACELERADOR HIPERSÔNICO CONSIDERANDO ACOPLAMENTO AEROELÁSTICO. 2023. Thesis (M.Sc. in Science and Space Technologies) - ITA, CAPES. Supervisor: Roberto Gil Annes da Silva.

54. Robson Carlos de Moura Junior. Método de Galerkin Descontínuo Bem-Balanceado para as Equações de Águas Rasas. 2022. Thesis (M.Sc. in Applied Mathematics) - UNICAMP, CAPES. Supervisor: Maicon Ribeiro Correa.

55. Rodrigo Augusto de Godoi. Análise de Indicadores de Complexidade Econômica das Mesorregiões Brasileiras com Base em suas Matrizes de Exportações e Importações. 2022. Thesis (M.Sc.) - USP, . Supervisor: Marcelo de Souza Lauretto.

56. Samuel Henrique Silva. Um Modelo Baseado em Janelamento para a Classificação de Imagens Médicas por Redes Neurais Convolucionais. 2023. Thesis (M.Sc. in Applied Computing) - USP, . Supervisor: Renato Tinós.

57. Sérgio Baldo Júnior. Algoritmos Genéticos e Redes Neurais Recorrentes do tipo LSTM para Auxílio ao Diagnóstico Médico. 2023. Thesis (M.Sc. in Applied Computing) - USP, . Supervisor: Renato Tinós.

58. Sérgio Reinaldo Marteletto. Técnicas de seleção de atributos através de Random Forests: Um estudo de caso para detecção de tendências em séries temporais financeiras. 2022. Thesis (M.Sc.) - USP, CAPES. Supervisor: Marcelo de Souza Lauretto.

59. Shayane da S. Carvalho. Abordagens de otimização para agrupamento de itens para a formação de kits cirúrgicos(CoSupervisora Mariá Cristina Vasconcelos Nascimento Rosset - Inicio 2021 e defesa 2023). 2023. Thesis (M.Sc. in Computer Sciences and Computational Mathematics) - USP, . Supervisor: Maristela Oliveira dos Santos.

60. Thiago Resek F. dos Anjos. Inferring Geographical Location of Images. 2022. Thesis (M.Sc.) - IC - UNICAMP, . Supervisor: Anderson de Rezende Rocha.

61. Tobias Mesquita Silva da Veiga. Scalable Losses in Session-based Recommendation Systems with Deep Learning Architecture. 2022. Thesis (M.Sc. in Computer Sciences and Computational Mathematics) - ICMC - USP, . Supervisor: Luis Gustavo Nonato.

62. Victor Barcelos Victorino. Study on the impact of gaps in the boundary layer stability. 2022. Thesis (M.Sc. in Mechanical Engineering) - Escola de Engenharia de São Carlos USP, CNPq. Supervisor: Marcello Augusto Faraco de Medeiros.

63. Vinicius Cabral da Silva. Condições sequenciais de otimalidade e condições de qualificação em otimização não-linear. 2022. Thesis (M.Sc. in Mathematics) - UNESP, CNPq. Supervisor: Geraldo Nunes Silva.

64. Vinicius Camargo da Silva. Sumarização Extrativa de Texto Utilizando Modelos Aditivos Generalizados com Interações para Seleção de Sentenças. 2023. Thesis (M.Sc. in Computer Sciences) - UNESP, CAPES. Supervisor: João Paulo Papa.

65. Vinicius Cleves de Oliveira Carmo. Busca Semântica em Textos sobre Óleo e Gás. 2022. Thesis (M.Sc. in Eletrical Engineering) - USP, Fundação da USP. Supervisor: Fabio Gagliardi Cozman.

66. Yago Ferreira Gomes. APRENDIZADO DE MÁQUINAS PARA ESTIMAR A CAPACIDADE DE CARGA EM ESTACAS PRÉ-MOLDADAS DE CONCRETO. 2022. Thesis (M.Sc.) - ITA, CAPES. Supervisor: Dimas Betioli Ribeiro.

67. Yuri Batista Ishizawa. Aplicação de Velocimetria por Imagem de Partículas em Larga Escala (LSPIV) para Medição de vazão em canal aberto utilizando plataforma ?open-source?. 2022. Thesis (M.Sc. in Hydraulic Engineering) - USP, CAPES. Supervisor: Edson Cezar Wendland.

B. Publications

B.1 BOOKS

[1] T. Augustin, F. G. Cozman, and G. Wheeler, eds. *Reflections on the Foundations of Probability and Statistics*. Springer International Publishing, 2022. DOI: `10.1007/978-3-031-15436-2`.

[2] M. F. Martins, R. Ramos, and H. Belich, eds. *Multiphase Flow Dynamics*. Springer International Publishing, 2022. DOI: `10.1007/978-3-030-93456-9`.

[3] F. S. de Sousa and F. F. Rocha. *Métodos de volumes finitos para modelagem computacional de reservatórios de petróleo*. Vol. 96. SBMAC, 2023. ISBN: 978-65-86388-18-3. URL: `https://www.sbmac.org.br/wp-content/uploads/2023/07/volume96.pdf`.

B.2 BOOK CHAPTERS

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