ANDRÉ LUÍS MENDES FAKHOURY

andfakhoury@gmail.com ◇ www.linkedin.com/in/andrefakhoury ◇ github.com/andrefakhoury

EDUCATION

University of São Paulo - São Carlos, Brazil   *March 2023 - December 2027 (expected)*
Ph.D. Student in Computer Science and Computational Mathematics
Artificial Intelligence - Machine Learning and Data Mining

University of São Paulo - São Carlos, Brazil   *February 2018 - February 2023*
Bachelor in Computer Science   *CGPA 9.5/10, 3rd place in class (out of 118)*

WORK EXPERIENCE

Software Engineer Intern at Meta (formerly Facebook, Inc)   *January 2022 - April 2022*
Team: Network Infra - Network Delivery Systems - Design & Config.
· Implemented modernizations of the Device Management for Meta's network database through alignment with current industry standards and optimization for future scalability and reliability. Developed expertise in backend development and network infrastructure utilizing Python and C++.

PROJECTS AND ACTIVITIES

Time Series Classification Using the Optimum-Path Forest Algorithm   *September 2022 - December 2022*
Data Science and Time Series Data Mining focused research project.
· Explore the Optimum-Path Forest (OPF) supervised classifier in the time series classification domain. The OPF is a similarity-based technique never explored in time series domains. OPF was tested on 128 datasets from the UCR Time Series Classification Archive, using Dynamic Time Warping (DTW) and Euclidean distances as metrics. OPF results in fair to middling classification error rates (statistically comparable to the Euclidean distance nearest neighbor classifier).

Image Curves Reconstruction by Means of Robust Features   *October 2020 - September 2021*
Computer Vision and Computational Mathematics focused research project.
· Implemented a technique for reconstructing image curves using sample points and curvature information. Utilized image processing, computational mathematics, and computer vision to extract and identify key points on the curve of figures within an image.

University Teaching Assistant

University T. A. for *Introduction to Computer Science I* (2019/1), *Calculus II* (2019/2), *Laboratory of Advanced Algorithms II* (2021/2), *Laboratory of Advanced Algorithms I* (2022/1), and *Advanced Algorithms and Applications* (2022/2) courses in the *University of Sao Paulo*.
· Provided instructional support to professors by creating and grading exams, projects, and exercises and led weekly exercise-solving and concept review classes. Tutored over 300 students in their first contact with programming, calculus techniques, and advanced computer science topics, resulting in improved skill sets and understanding.

Member, Coordinator, and Tutor of GEMA · Competitive Programming Study Group *February 2018 - Current*
· Gave C++, algorithms, and data structures lessons focused on Competitive Programming Collegiate Contests and Olympiad in Informatics to about 100 undergraduate students annually. Some classes are available on YouTube, which has over 15000 views. Managed team formations, lesson schedules, problem sets, and local competitions for 4 years.
· Competed in several competitive programming contests, such as ICPC, Facebook HackerCup, and Google CodeJam. Obtained good results, including two ICPC World Finals qualifications in 2021 and 2022.

SKILLS

Programming Languages	Languages	Areas of interest
· C/C++ - 8 years	· Portuguese (native)	· Machine Learning
· Python and Java - 6 years	· English (advanced)	· Data Mining
· PHP, C#, SQL, and JavaScript - 2 years	· Spanish (intermediate)	· Theoretical Computer Science

AWARDS

· *4th place (Golden Medal) out of 55* in the 2021-2022 ICPC Brazil Regional Programming Contest - *2022*
· *6th place out of 513* in the 2021-2022 ICPC Brazil Subregional Programming Contest - *2021*
· *4th place* (Silver Medal) *out of 64* in the 2020-2021 ICPC Latin American Regional Programming Contest - *2021*
· *2nd place out of 799* in the 2020-2021 ICPC Brazil Subregional Programming Contest - *2020*
· *12th place out of 687* in the 2019-2020 ICPC Brazil Subregional Programming Contest - *2019*
· *25th place out of 1821* (Honorable Mention) in the Brazilian Olympiad in Informatics (OBI) - *2018*