

# ANDRÉ LUÍS MENDES FAKHOURY

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

## EDUCATION

### **Universidade de São Paulo - São Carlos, Brazil**

Bachelor in Computer Science

February 2018 - December 2022 (expected)

CGPA 9.4/10, 5th place in class (out of 118)

### **Colégio Técnico Industrial Isaac Portal Roldán - Bauru, Brazil**

Informatics Technical High School

February 2015 - December 2017

CGPA 9.0/10, 1st place in class (out of 60)

## MAJOR PROJECTS AND ACTIVITIES

### **Image curves reconstruction by means of robust features**

October 2020 - September 2021

Computer vision focused research project.

· Contemplated fields of image pre-processing - including segmentation, noise reduction and boundary extraction -, curvature and robust features calculus, besides curves reconstruction by means of previously extracted important points.

### **University Teaching Assistant - Introduction to Computer Science**

March 2019 - June 2019

· Helped professors with the creation and grading of exams, projects and exercises for introductory Computer Science classes. Gave weekly tutoring classes about C programming language and programming logic, helping students to improve their skill sets on their first contact to programming.

### **University Teaching Assistant - Calculus 2**

August 2019 - November 2019

· Prepared and gave weekly tutoring classes focused on exercise solving and concept reviews about integration techniques, curves, several variable functions and more. Also helped professors with the creation and grading of exams.

### **University Teaching Assistant - Laboratory of Advanced Algorithms 2**

October 2021 - Current

· Helped the professor on the organization of classes and preparation of weekly exercises related to Graphs, Dynamic Programming, Number Theory and Computational Geometry, aiming to help students to learn advanced algorithms in a practical way.

### **Member and Teacher of GEMA**

February 2018 - Current

University Study group focused on Competitive Programming Collegiate Contests and Olympiad in Informatics training, with weekly classes about algorithmic challenges.

· Gave C++, key algorithms and data structures lessons to about 100 undergraduate students per year, and competed in several competitive programming contests.

### **Member and Writer of GANESH**

February 2018 - February 2019

University Extension group focused on information security.

· Wrote blog posts about cryptography and security attacks on Medium (which received over 3 thousand views), participated in Capture the Flag competitions and watched lectures about the basics of security related topics, such as networking, web security, reverse engineering and social privacy.

### **Member of DATA**

February 2019 - February 2020

University Extension group focused on data science and machine learning.

· Went to weekly meetings and lectures about Python, key algorithms, machine learning, data pre-processing techniques and frameworks.

### **BMP Compressor**

April 2021 - June 2021

A compressor to BMP files using some well-known multimedia algorithms

· Developed in C, without using any auxiliary frameworks, for multimedia classes. It converts the original BMP file to a compressed binary .bin file. It can later decompress back to BMP with a small perceptible difference to the human eyes.

### **Oblivious Memories**

April 2017 - November 2017

An educational RPG/Visual Novel about World War Two, made by a team of nine high school students.

· Built with Unity3D, using the C# Language.

· Technical degree final project, aiming to influence the study of History in middle schools.

## SKILLS

### **Programming Languages**

- C/C++ - 7 years
- Python and Java - 5 years
- PHP, C#, SQL and JavaScript - 3 years
- Delphi - used for 9 months

### **Languages**

- Portuguese (native)
- English (advanced)

### **Areas of interest**

- Competitive programming
- Data Structures
- Image processing
- Computer vision

## AWARDS

- 4th place out of 64 (Silver Medal) 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 57 in the 2019-2020 ICPC Latin American Regional Programming Contest - 2019
- 12th place out of 687 in the 2019-2020 ICPC Brazil Subregional Programming Contest - 2019
- 32th place out of 746 in the 2018-2019 ICPC Brazil Subregional Programming Contest - 2018
- 25th place out of 1821 (Honorable Mention) in the Brazilian Olympiad in Informatics (OBI) - 2018
- First Place in the Regional Mathematical Olympiad of Unesp Bauru for Public Schools (ORMUB) - 2017
- Bronze Medal in the Brazilian Physics Olympiad for Public Schools (OBFEP) - 2016
- Bronze Medal in the Brazilian Astronomy Olympiad (OBA) - 2016