# Gustavo M. Carlos

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github.com/gustavoM32

Sao Paulo, Sao Paulo, Brazil Location

**EDUCATION** 

Bachelor's Degree, Computer Science

University of Sao Paulo, Brazil

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February 2019 - July 2023

## PROFESSIONAL EXPERIENCE

### Software engineering intern Google

August 2022 - November 2022

- · Implemented a view to develop and run tests for scripts that generate UIs for internal use
- Developed with a Java abstraction of Material Design components that are then processed into JavaScript

LinkedIn

Website

- Persisted the user-created tests in a Google globally distributed database
- Worked with Protocol Buffers, RPC, Bazel, and Guice

### ACADEMIC EXPERIENCE

### Capstone project University of Sao Paulo

March 2022 - December 2022

- Developing an web application to organize the study for programming competitions (source code)
- Integrated with the Codeforces API to get data to display on the web app
- Built three main components: the MongoDB database, the Spring backend, and the React frontend
- Used Spring Rest as the main way of mutating the user-created data on the server
- Worked with several technologies: Kotlin, Spring Data, MongoDB, and Gson for the back-end; TypeScript, React Query, Node.js, Material Design, Bootstrap, Axios, Jest, and Cypress for the front-end

### Member of MaratonUSP University of Sao Paulo

February 2019 - Present

- MaratonUSP is a group to study for programming competitions
- Attended classes made by other students, and also taught one about graphs and the depth-first algorithm
- Spent more than a thousand hours studying algorithms and data structures and practicing both by myself and in teams of three people

### **Undergraduate researcher** *University of Sao Paulo*

May 2020 - April 2021

- Helped develop a health dashboard (source code)
- Worked with more than a million records from the Brazilian National Health Service dataset
- Improved the performance by reducing the amount of data sent to the front-end
- Worked with Ruby On Rails, PostgreSQL, Node.js, jQuery, Jasmine, Cucumber, and Git in this project
- Co-authored an article published in the Visual Analytics in Healthcare 2020 workshop

# PROJECTS

### Objetivos (Goals)

August 2019 - Present

- A C++ command-line program designed to help set and monitor goals and to-dos (source code)
- Currently looking for ways to visualize the program data to help the decision-making process

#### Finances app

October/November 2021

- An app for financial management developed in the Mobile Computing class
- Developed two versions, one with Expo (source) and the other one with Android Studio (source)
- Built a user login system and retrieved and stored data from the OpenWeatherMap API in both versions
- Added a map with the Maps SDK and supported Firebase notifications in the Android Studio version

#### **SpaceWars**

- A space shooter game developed in C with two other friends as a class project (source)
- Simulated objects motion, gravity, and collision detection; created the graphics using a teacher library in X11

### SKILLS

### **LANGUAGES**

Portuguese Native English Fluent

**AWARDS** 

1st place ACM-ICPC Subregional Sao Paulo 2021 (3rd in Brazil)

Gold medal at the Brazilian Mathematics Olympiad (OBMEP 2018) 1st place