André Filipe Caldas Laranjeira

Phone: +1 (650) 421-1742
Email: AndreLaranjeira@protonmail.com
LinkedIn: https://www.linkedin.com/in/andre-laranjeira/

Education

- Master's degree in Computer science – University of Georgia (Athens, GA, USA)
  - August/2022 – May/2024 (4 university semesters);
  - GPA: 4.00/4.00.
- Bachelor's degree in Computer engineering – University of Brasília (Brazil)
  - March/2016 – June/2021 (10 university semesters);
  - Academic performance index (GPA equivalent): 4.87/5.00;
  - Featured student of those graduating in computer engineering in Fall/2020 semester.

Work experience

- Graduate teacher assistant – University of Georgia
  - Fall/2022, Spring/2023, Fall/2023 and Spring/2024 semesters;
  - Helped professors with grading and course logistics. Conducted programming lab sections.
- Web developer intern – Federal Court of Accounts (Brazil)
  - October/2019 – March/2021;
  - Developed and maintained internal web applications using Oracle Apex and PL/SQL.
- Director of administration and finances – Struct junior enterprise
  - February/2020 – December/2020;
  - Managed and supplied financial documents needed to run the junior enterprise.
- Full-stack developer – Struct junior enterprise
  - January/2019 – January/2020;
  - Developed websites and web applications using Ruby on Rails and MySQL.

Technical habilities

- Programming languages: Knowledgeable in Python, Scala, Java, C and C++. Experience with Rust, Javascript, HTML/CSS, SCSS, Ruby, Typescript, Kotlin, Assembly (x86, MSP430 and MIPS), R and VHDL;
- Frameworks and libraries: Knowledgeable in Ruby on Rails and Oracle APEX. Experience with React, React native, Django, Qt and SDL2;
- Databases: Knowledgeable in MySQL, PL/SQL and data modeling. Experience with PostgreSQL and Google Firebase;
- Artifical Intelligence (AI): Experience with Artificial Neural Networks and Reinforcement Learning;
- Other: Knowledgeable in Git and GitHub, Linux and Bash. Experience with Agile methodologies, NodeJS, Expo, Doxygen, PThreads, GDB, GitHub Actions and Semantic Versioning.

Personal habilities

- Languages: Fluency in Brazilian Portuguese and English (117/120 in TOEFL IBT);

Project portfolio

- ScalaTion Framework (Scala, Java, C) – 2024
  - Description: The ScalaTion framework is a Scala-based framework for Simulation, Optimization and Analytics. As part of my Master's Thesis in the University of Georgia, I ported a mathematical optimization C library to the ScalaTion framework and implemented in it new optimization features in Scala and Foreign Function and Memory (FFM) features in Java 20. I also maintained the latest repository of the ScalaTion project on GitHub for some months, administering branches, granting repository access and merging features.
  - Roles: Developer, Maintainer.
  - Link: https://github.com/scalation/scalation2

- Heart Failure Prediction (Python, AI, Javascript, NodeJS, React) – 2021
  - Description: As part of my Bachelor's dissertation in the University of Brasília, I developed a small website using JavaScript, NodeJS and React to collect patient data and predict the probability of heart failure in the patient through a Python script that calls a machine learning (AI) model.
  - Roles: Developer.
  - Link: https://github.com/AndreLaranjeira/ML-HeartFailureSurvival

- Meau App (Typescript, Google Firebase, React Native, Expo) – 2021
  - Description: University group project to learn App Development. Developed an Android mobile app using Expo, a Typescript and React Native frontend and a Google Firebase backend. Served as the Scrum Master throughout the project by designating the tasks for each sprint and assigning them to each group member.
  - Roles: Developer, Scrum Master.
  - Link: https://github.com/Hugo-NF/meau-app

- Message Logger (C, PThreads, Doxygen, Semantic Versioning) - 2021
  - Description: Personal library I developed for logging messages in C programs. I developed all features of this library, working with concepts such as ANSI escape codes, VA lists and PThreads. I also managed all aspects of maintaining, versioning and documenting the code.
  - Roles: Developer, Maintainer.
  - Link: https://github.com/AndreLaranjeira/MessageLogger

- ProxyGate (C++, Qt, Doxygen) - 2019
  - Description: University group project to learn Computer Network concepts. Developed a desktop application using Qt and C++ to act as a HTTP Proxy server between the browser and the internet. Allows users to inspect and edit HTTP requests before they are sent or received.
  - Roles: Developer.
  - Link: https://github.com/AndreLaranjeira/ProxyGate