

FRANCISCO GUIMARAES PENA

Software Engineer Intern at Amazon, Computer Science student at UNICAMP

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MAIN INTERESTS

Math, artificial intelligence, business, statistical analysis, finance.

WORK EXPERIENCE

Amazon: Software Engineer Intern [Nov 2023 - present]

- Development, documentation and maintenance of backend systems, deployed to AWS, which manage Amazon global invoicing system with **Java** and **Typescript**.

Copybase: Data & Software Engineer [Dec 2022 - Nov 2023]

- Lead data-driven initiatives and built dashboards and reports that identified the ideal customer profile, resulting in a successful product pivot. This contributed to increased revenue and reduced churn. (**DataStudio, Google Cloud Platform, Stripe & Hotmart**)
- Engineered end-to-end data pipelines from scratch, extracting, processing, transforming large data sets and extracting actionable insights. (**Python: Pandas, Numpy, Matplotlib**)
- Developed, maintained, and improved high-usage Machine Learning (NLP) integrated APIs. (**Python: FastAPI, Langchain**)
- Developed automated web scraping and crawling processes, significantly improving information gathering efficiency. (**Python: BeautifulSoup & Selenium**)

Matera Systems: Software Engineer [Dec 2020 - Dec 2022]

- Worked on updating and creating new APIs that required a high level of reliability and correctness. (**Java, Spring, JUnit, Mockito, Tomcat, Docker, Jenkins CI/CD**)
- Enhanced performance of Oracle stored procedures and SQL queries, resulting in optimized data retrieval and manipulation. (**SQL, Oracle, PL/SQL, SQL Database**)
- Designed and implemented relational database schema changes maintaining data integrity during deployment.

EDUCATION

University of Campinas (UNICAMP)

Bachelor in Computer Science [Jan 2019- Dec 2024 (expected)]

- Top 3** University in Latin America
- Engaged in multiple graduate-level courses in Machine Learning, Data Processing, Algorithms Optimization and Data Structures. (SciPY, Scikit-Learn, PyTorch, TensorFlow, Keras, & XGBoost) **GPA: 0,8675 / 1.0**

University of Salamanca

Studying of Spanish language and culture [July 2023 - Aug 2023]

- Secured a full 100% scholarship for a cultural and language exchange in Salamanca, Spain.

Federal University of Viçosa's High School (CAP-COLUNI)

Recognized as Brazilian Best public High School [Jan 2016 - Dec 2018]

- Selected between 2275 applicants

RESEARCH EXPERIENCE

Digital Identity in Blockchain for IoT Devices: Researcher at University of Campinas [Aug 2022 - Mar 2023]

- Blockchain development using Hyperledger Blockchain.
- Worked with Distributed Systems and Network.
- Prototyped an efficient mechanism for a decentralized self-sovereign digital identity.
- Advisor: PhD. Juliana Freitag Borin (Institute of Computing - University of Campinas)**

Social Project: Junior Researcher funded by Brazilian National Council for Scientific and Technological Development (CNPQ)

[Aug 2017 - June 2018]

- Interviewed multiple education professionals to collect data and testimonials.
- Advisor: PhD. Allain Wilham Silva de Oliveira (Cap-COLUNI - Federal University of Viçosa)**

AWARDS

Brazilian Astronomy and Astronautics Olympiad [May 2018]

- Awarded with a national Gold medal.

International Math Olympiad Without Borders [Aug 2018]

- Awarded with a national Gold medal.
- Invited to participate in the AIMO (Asia International Mathematical Olympiad) - Bangkok, Thailand.

VOLUNTEERING

Entrepreneurship Club [Aug 2022- Mar 2023]

Manager and Coordinator.

- Led the "Acelera" startup pre-acceleration program, where I mentored over 30 entrepreneurs with early-stage initiatives.

Computer Science Week [June 2019- Sept 2019]

Team and Staff.

- Organized the event with over 200 attendees and 20 speakers, including employees and CEOs.

Volunteer Mathematics Teacher [Apr 2017- Aug 2018]

Coordinator and Teacher.

- Conducted weekly classes, planned study materials and exams.

PROJECTS

IncluEdu [Aug 2023 - Sept 2023]

- Fullstack Application aimed at supporting schools and teachers in the inclusive education of students with diverse learning needs.
- Developed in **Flutter** and **PHP**

Cooked [Apr 2021 - June 2021]

- Web app for recipe sharing with ingredient-based filtering
- Developed in **Javascript, CSS, HTML** for a university class.

Summerpay [Jan 2019 - Mar 2019]

- Mobile app for easy transactions and payments
- Developed in **Java** and **Typescript**

SKILLS

Programming related:

Python (proficient), Java (proficient), SQL (proficient)
Git (proficient), Linux (proficient), C (intermediate)
HTML/CSS (prior usage), JavaScript/Typescript (prior usage)
Flutter (prior usage), PHP (prior usage)

Soft Skills:

Business Sense, Critical Thinking, Communication

Languages:

Portuguese (native), English (fluent), Spanish (advanced)