

# Pedro Gabriel Amorim Soares

Belo Horizonte, Brazil | pedrogabrielbhz@gmail.com | +55 31 995922992

linkedin.com/in/pedro-gabriel-soares-34a81529a | github.com/pgbhz | pgbhz.github.io

## Professional Experience

**Software Engineer Intern**, Google – Belo Horizonte, Brazil Sept 2025 – Present

**Software Engineer**, Vulcanet – Remote (Campinas, SP) Aug 2021 – Nov 2022

- Refactored microservices architecture in Python and TypeScript using DDD and CQRS patterns, improving system scalability and response times across client deployments
- Implemented asynchronous SQLAlchemy ORM and GraphQL API layers for event-driven data processing
- Built a Python templating library to generate parameterized Docker configurations, enabling rapid custom deployments and reducing operational overhead for new clients
- Optimized Grafana dashboard queries by refactoring SQL code, reducing query execution times by over 50%

**Applied Research Intern**, Dep. of Computer Science, UFMG Mar 2021 – Aug 2021

- Implemented and optimized graph pattern mining algorithms in Python and C++ on a massive dataset of hundreds of thousands of public auction data points from the Public Ministry of Minas Gerais; tackling the NP-hard challenge posed by max-clique computations
- Contributed to the design and deployment of scalable data ingestion pipelines and visualization infrastructure using Python, Plotly, Docker, MySQL, PySpark, and NoSQL stacks

**Research Assistant**, Dep. of Computer Science, UFMG Mar 2021 – Aug 2021

- Developed evolutionary heuristic (ant-colony) algorithms in Python and C++ for mining survival models in large-scale medical databases, such as Brazil's public COVID-19 dataset comprising millions of patient records
- Contributed to Google's Latin America Research Awards (LARA)-winning project on COVID-19 data mining, which was presented at BRACIS and published by Springer

**Research Assistant**, Faculty of Economic Sciences, UFMG Jan 2020 – Dec 2020

- Developed machine learning models in Python (scikit-learn, Keras, TensorFlow, DEAP) for insolvency prediction of Brazilian health insurance providers from multi-year financial statements of hundreds of companies, using genetic algorithms for feature selection and pruning, achieving accuracy of over 86%

**Machine Learning Research Intern**, ENACOM Mar 2020 – Sept 2020

- Migrated XGBoost failure prediction pipeline from Python to C++, optimizing inference speed for real-time industrial process monitoring

**Research Intern**, Czech Technical University – Prague Jan 2020 – Feb 2020

- Awarded a two-month research scholarship by the Institute of Czech-Brazilian Academic Cooperation

## Education

**PUC Minas**, BSc in Computer Science Expected Dec 2025

- Average grade: 88% (GPA 3.3/4.0)
- Exchange Program at Université Gustave Eiffel / ESIEE Paris (Fall 2024)
- Transferred from BSc in Computational Mathematics at UFMG

## Skills

**Programming Languages:** C++, Golang, Python, Java, C#, C, Rust, TypeScript

**Tools of the Trade:** PostgreSQL, MySQL, MongoDB, Redis, Django, FastAPI, React, Angular, GraphQL, Docker, Kubernetes, CI/CD, PySpark, Microservices, Domain-Driven Design (DDD), CQRS, Machine Learning, Data Mining, A/B Testing, Load Testing, Event-Driven Architecture

**Languages:** English (C2 — TOEFL iBT 116/120), French (B1), German (A2), Portuguese (Native)