+55 31 98878-1887
andrei.massaini@hotmail.com
GitHub
LinkedIn
Belo Horizonte, Brazil

Andrei Massaini

EDUCATION

Pontifical Catholic University of Minas Gerais
B.Sc. in Computer Science *2021–2025*

SKILLS

Technical Skills

- **Programming Languages:** Java, Python, C++
- **Web Development:** Spring Boot, Django, Angular, GraphQL, RESTful APIs
- **Databases:** SQL, MongoDB, PostgreSQL, query optimization
- **DevOps/Cloud:** Docker, AWS, GCP, CI/CD pipelines
- **Machine Learning:** TensorFlow, scikit-learn, PyTorch, XGBoost
- **Tools:** Git, GitHub, JUnit, Postman, OpenCV, Google Earth Engine, GDAL

Languages

- Portuguese (Native), English (Fluent), Spanish (Proficient)

PROFESSIONAL EXPERIENCE

Gedanken São Paulo - Brazil
Software Engineer Intern *Mar 2025 – Present*

- Developed and maintained web-based supplier homologation platform using Python and Django.
- Implemented new features and system enhancements for supplier onboarding and compliance processes.
- Built and optimized GraphQL APIs to improve data retrieval efficiency and system interoperability.
- Maintained and enhanced PostgreSQL database operations, ensuring data integrity and performance.

Brandt Meio Ambiente Belo Horizonte, MG
Machine Learning Intern *Aug 2024 – Mar 2025*

- Engineered a real-time water quality monitoring system integrating machine learning and remote sensing.
- Developed predictive models leveraging satellite spectral reflectance for water quality estimation.
- Processed spatiotemporal geospatial data using Python, TensorFlow, and scikit-learn.
- Collaborated with environmental scientists to refine model accuracy and interpretability.

PUC Tec Belo Horizonte, MG
Full Stack Development Intern *Aug 2024 – Dec 2024*

- Developed scalable RESTful APIs, enhancing system interoperability and efficiency.
- Designed and optimized database schemas, reducing query execution time by 30%.
- Built dynamic, responsive UIs using Angular for multiple enterprise projects.

PROJECTS

Cell Recognition for Pap Smear Exams

- Developed an AI-powered application for automated cytological classification.
- Implemented feature extraction using Hu's moments and texture analysis.
- Trained CNN and XGBoost models, achieving 95.16% (XGBoost) and 80.64% (EfficientNet) accuracy.
- **Project link**

Arborescence Comparison in Directed Graphs

- Implemented and benchmarked Edmonds' algorithm and GGST for minimum arborescence detection.
- Conducted comparative analysis on large-scale graph datasets, assessing algorithmic efficiency.
- Visualized performance metrics across diverse graph structures.
- **Project link**