

Gabriel Bromonschenkel

gabriel.mota.b.lima@gmail.com | +55 27 99600-1277 | linkedin.com/in/gabriel-mota-b-lima | github.com/gabrielmotablma

Professional Experience

- **Banco do Brasil (via Stefanini)** Brasília, DF
Data Scientist Apr 2023 – Present
 - Developed a **People Analytics** clustering model for talent discovery; identified 300+ high-potential employees for IT roles, enabling the department to double its available positions.
 - Engineered an end-to-end **OCR pipeline** for fraud detection using Tesseract and NLP similarity scoring, increasing audit coverage by 15% and preventing millions in potential fines.
 - Architected a **Recommendation System** using Spark ML (ALS); migrated from SVD-based models to handle large-scale enterprise data volume.
 - Applying **Causal Inference** and **Multi-Arm Bandits** for debt renegotiation experiments, optimizing discount levels to increase final capital recovery.
- **Tok&Stok** São Paulo, SP
Data Scientist Jun 2022 – Mar 2023
 - Improved a **Slack bot for Anomaly Detection** and Power BI automation, reducing business complaints by 30% and lowering software costs by centralizing premium license usage.
 - Integrated **CI/CD for BI** via GitHub Actions, enabling versioning and automated rollbacks for 75% of company reports.
 - Managed **Data Marts** in Azure Analysis Services, ensuring >90% data integrity during a complex business transition through custom DBT and SQL adaptations.

Research Experience

- **Imaging, Vision and AI Laboratory (LIVIA)** Montreal, QC
Visiting Researcher Sep 2025 – Oct 2025
 - Researched **Vision-Language Models (VLMs)** for Image Captioning at ÉTS; conducted comparative evaluations of Transformer-based models and LLM-as-a-Judge frameworks.
 - Optimized 7B+ parameter models for GPU memory using **LoRA, QLoRA, and 4-bit Quantization**.
- **Computational Intelligence Laboratory (LAICSI)** Serra, ES
AI Research Assistant Sep 2023 – Dec 2025
 - Lead researcher on **Multimodal Models** for Brazilian Portuguese; pioneered studies on translation effects over Vision Encoder-Decoder (VED) models and Large VLMs like Llama and Phi-3 for Vision.
- **University of Sao Paulo (USP)** São Paulo, SP
AI Research Assistant Jul 2020 – Dec 2021
 - Researched hybrid methods applying **Machine Learning and Ontologies** for psychiatric clinical analysis, using Scikit-Learn and Unified Foundation Ontology (UFO).
- **Federal University of Espírito Santo (UFES)** São Mateus, ES
AI Research Assistant Aug 2019 – Aug 2021
 - Researched **Smart Grid Load Identification** and facial recognition using CNNs and Extreme Learning Machines (ELM), using Tensorflow, MongoDB and Databricks.

Education

- **Federal Institute of Espírito Santo (IFES)** Serra, ES
M.Sc. in Computer Science (Applied Computing) 2023 – 2025
- **Federal University of Espírito Santo (UFES)** São Mateus, ES
B.Sc. in Computer Engineering 2017 – 2022

Technical Skills

ML & AI: VLM, LLM, NLP, CV, Transformers (ViT, Swin, BERT, GPT), Causal Inference, Bandit Algorithms.

Big Data: PySpark, Hadoop, Hive, Hue, Spark MLlib, Databricks, Snowflake, DBT.

Tools: AWS, Azure, Python, SQL, Terraform, Docker, Kubernetes, GitHub Actions.