Rafael E. Arbex-Murut

LinkedIn · GitHub

EDUCATION

University of California, Berkeley – Master of Information and Data Science   May 2024
- Courses: Statistics, Applied Machine Learning, Natural Language Processing, Computer Vision, Data Ethics
- Capstone: Productionized a fine-tuned LLM model using AWS for news bias detection plugin.

Virginia Tech – Bachelor of Science in Computer Science, Math Minor – Cum Laude   May 2021

SKILLS & TOOLS

Programming & Scripting: Python, SQL, R, Java, C, C++, MATLAB, Windows, Linux, Unix, Docker, Git/Github, CTE, Query Optimization, n8n, Workflow Automation
Data & Visualization: Power BI, Tableau, Jupyter Notebook, Pandas, NumPy, Matplotlib, ggplot2, Excel
Machine Learning & AI: Supervised & Unsupervised ML, LLMs, Neural Networks, Keras, Tensorflow, PyTorch, HuggingFace, Productionizing Models, MLflow, Kubeflow
Cloud & Big Data: AWS, GCP, Azure Databricks, Spark, Hadoop, ETL, Data Warehousing, Data Pipelines
Business Intelligence: Agile, Scrum, Jira, Storytelling, Visualization, CI/CD, A/B Testing, KPI Tracking
Statistics & Modeling: Linear Regression, Bayesian Statistics, Predictive Modeling, Naïve Bayes, K-means, Decision Trees
Languages: Portuguese (Bilingual Proficiency), Spanish (Full Professional Proficiency)

PROFESSIONAL EXPERIENCE

General Motors Company
Data Analyst, Software Engineer, Business Analytics – Software and Services   June 2021 – May 2025
- Modeled vehicle development workload data to identify bottlenecks in the vehicle development process.
- Improved first-build compliance by creating an automated software quality metric system with PowerBI and DAX used by **100+ engineers**.
- Automated portfolio management of vehicle architecture tags using saving **300+ engineering hours** per year.
- Created a self-service tool on Databricks using Python, and PySpark to automate analyses of thermal propagation data used by control engineers.
- Developed a price management tool on PowerBI by Global Purchasing and Supply Chain to improve engineering sourcing.
- Designed and automated software testing of Google Assistant features on three GM vehicle platforms.
- Created and led validation plans across seven programs to ensure performance and safety compliance.
- Obtained Design for Six Sigma Green Belt and Black Belt certifications.
- Completed Safe Agile certification.

General Motors Company – Exploring Careers through Experiential Learning (EXCEL) Internship
Intern, Electrical Components Hardware – Power Signals and Distribution Systems   June 2020 – August 2020

EXTRA-CURRICULAR, AFFILIATIONS & LEADERSHIP

General Motors Employee Resource Groups – *GM Generations, Secretary and Business Planner; GMLN, Warren Brazilian Chapter Board; TRACK Engagement Team*   June 2021 – Present
- Promoted employee engagement and inclusivity initiatives at General Motors by organizing events averaging **800+ attendees**.
- Tracked membership growth and oversaw PII-compliant member analytics for GM Generations employee resource group.

UC Berkeley MIDS Mentor
2025 Outstanding Mentor Award recipients
- Mentored an incoming MIDS student to facilitate transition into the masters program and succeed through classes.
- Nominated for and received the 2025 Outstanding Mentor Award.