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: Bias Beacon, created a Google Chrome plugin that automates bias detection in news articles using a fine-tuned BERT large language model. Deployed using Docker and AWS.

Virginia Polytechnic Institute & State University – B.Sc. Computer Science, Math Minor – Cum Laude   May 2021

SKILLS & TOOLS

Programming & Scripting: Python, SQL, R, Java, C, C++, MATLAB, Windows, Linux, Unix, Docker
Data & Visualization: Power BI, Excel, Jupyter Notebook, Pandas, NumPy, Matplotlib, ggplot2
Machine Learning & AI: Supervised & Unsupervised ML, Neural Networks, Keras, TensorFlow, PyTorch
Cloud & Big Data: AWS, GCP, Databricks, Spark, Hadoop, ETL, Data Warehousing, Data Pipelines
Business Intelligence: Git/Github, Agile, Scrum, Jira, Storytelling, Visualization, CI/CD, A/B Testing
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   **Detroit, Michigan**
Data Analyst, Software Engineer, Business Analytics – Vehicle Mechatronics Embedded Controls (VMEC) June 2023 – Present
- Conduct statistical analyses of GM program workload data to identify bottlenecks in the vehicle development process.
- Improved first-build compliance by creating an automated software quality metric system used by 100+ engineers.
- Automated portfolio management of GM vehicle architecture tags saving 300+ engineering hours per year.

General Motors Company – Technical Rotational and Career Knowledge (TRACK) Program   **Detroit, Michigan**
Data Analyst; Data Specialist; Software Engineer; Validation Engineer – Global Product Development   June 2021 – June 2023
- Developed a price management tool used by Global Purchasing and Supply Chain to improve engineering sourcing.
- Automated testing of Google Assistant features on three GM vehicle platforms.
- Created and led validation plans of three components across seven programs to ensure performance and safety compliance.
- Obtained Design for Six Sigma Greenbelt and Blackbelt certifications.

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

White House Internship Program   **Washington, D.C.**
Intern, Office of Presidential Correspondence   January 2020 – April 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 DEI 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.

Journalism – *Columnist*   2020 – Present
- Featured on the *Wall Street Journal*'s Future View section 21 times.
- Columnist and Blogger for *The Daily Californian*, UC Berkeley's premier student paper.
- Contributor to *The Collegiate Times*, Virginia Tech's student-run newspaper.

Sigma Phi Epsilon Fraternity – *Communications Committee, Recruitment Committee*   2018 – 2021
- Led recruitment efforts that resulted in the highest IFC GPA for 8 consecutive semesters.