

EDUCATION

August 2018 – December 2022

Purdue University
Bachelor of Science in Computer Science and Mathematics

PROFESSIONAL EXPERIENCE

General Motors, Warren, MI (*Data Analyst/Machine Learning Engineer*)

February 2025 – Current

- Conducted exploratory data analysis on key datasets using Pandas to identify machine learning model improvement areas.
- Migrated legacy dashboards and data pipelines to Databricks to improve scalability and performance.
- Built interactive dashboards using Power BI leveraging large-scale Azure/AWS/Databricks data lakes.
- Analyzed electric battery pack build locations to leverage tax incentives resulting in \$1.5M in current cost savings.
- Worked on the development and training of an XGBoost based machine learning algorithm to detect TRP (Thermal Runaway Propagation) in customer vehicles, automating previously manual processes.
- Developed and optimized a Retrieval-Augmented Generation (RAG) LLM to translate complex technical information into accessible insights for non-technical stakeholders.

General Motors, Warren, MI (*TRACK Software Engineer*)

January 2023 – February 2025

- Standardized data ingestion and resolved data pipelines bottlenecks across teams, increasing data retention by 33%.
- Acted as the primary data expert, delivering data-driven insights and interpreting complex datasets, leading to a 27% reduction in data processing time.
- Automated ETL pipelines with Python and SQL, improving data extraction by 11%.
- Created Tableau and Power BI dashboards for engineering stakeholders to visualize KPIs.
- Managed long-range radars next gen software implementation for Super Cruise feature on Electric Hummer Program.
- Initiated project to reduce physical testing reliance using model correlation; communicating with Radar Expert for validation.

Engineering Innovation, West Lafayette, IN (*Associate Software Engineer*)

September 2021 – August 2022

- Refactored and debugged Python backend systems using MVC and ORM frameworks to support customer-facing tools.
- Applied NLP with PyTorch and ELK Stack to improve client search result relevance by 12% customer search results.

Mind Mantra Tutoring (CFO)

September 2020 – Current

- Built machine learning pricing algorithm using Scikit-learn and TensorFlow to improve customer retention by 6%.
- Developed a customer-facing dashboard for clients to monitor progress and finances using Node.js, SQL, and AWS RDS and implemented CI/CD pipelines for maintenance and continual updates. (123mmt.github.io)

SKILLS

Certifications: Six Sigma Green Belt & Black Belt

Programming Languages: Python, Java, C, C++, C#, Javascript, Swift

Cloud & DevOps: AWS RDS, CI/CD, Virtual Machines, GCP, Azure, Spark, Kubernetes, Docker

Tools & Libraries: Node.js, Databricks, Tableau, PowerBI, PyTorch, TensorFlow, Pandas, SQL, MongoDB, Xcode

Intangibles: Collaboration across multiple teams, Communication with technical and non-technical leads, Self-motivated to engineer new solutions