

Education

Michigan State University, College of Engineering – Michigander Scholars Program

Expected: May 2027

Bachelor of Science, Computer Science

Minor in Computational Math, concentration in Artificial Intelligence, Cognate in Economics & Business

Relevant Coursework: Data Structures, Python, Computer Architecture, Computational Modeling, Applied Linear Algebra

Experience

GE Aerospace

Livonia, MI

AI/ML Engineer Intern

May 2026 – August 2026

- Architected **agentic AI tool-call pipelines** on **AWS Bedrock** integrating **MCP servers** to connect ensemble cost models as callable tools, enabling a **VueJS** frontend to orchestrate end-to-end fleet financial forecasting workflows.
- Engineered an **LLM-as-a-judge evaluation framework** in **Python** to assess output quality of a fleet financial modeling tool, designing **reproducibility test suites** that benchmarked **LLM-synthesized financial narratives** against **ground-truth cost scenarios** across **hundreds of automated test cases**.
- Built **bronze-layer ingestion pipelines** on **Databricks** using **PySpark**, processing raw fleet telemetry into **Delta Lake** tables with schema enforcement, partitioning, and incremental load logic to feed ML models powering fleet financial analytics.

American Axle & Manufacturing

Detroit, MI

AI/ML Engineer Intern

July 2025 – August 2025

- Developed **Ignition based analytics application** for plant leadership using **Python scripts** to compute statistics across **thousands** of raw **CSV plant data rows**, cleaned and formatted data for future **ML** model, designed **PowerBI** dashboards.
- Integrated **Dell Technologies API** using **PowerShell** to **dynamically retrieve device serial numbers**; **cleansed, transformed, and validated** data; and designed a **Microsoft SQL Server relational database** to store, index, and **analyze** queries.
- Implemented **GitHub & Git** version control workflows for Ignition design teams, enabling efficient **branch management, change tracking**, and conflict resolution; pitched initiative to chief Ignition manager securing organization-wide adoption.
- Conducted **Linux** feasibility study using **Raspberry Pi**; Configured **CrowdStrike** endpoint protection and **Splunk** dashboards.

Facility for Rare Isotope Beams (FRIB), Particle Accelerator

East Lansing, MI

AI/ML Research Intern

August 2025 – Present

- Implemented **MCMC** algorithm reducing false positive rate by **23%**; Developed **ResNet** classification model using PyTorch.
- Classified particle collision events achieving 89% accuracy using **Minkowski** feature extraction.

DTE Energy

Detroit, MI

Business Automation Intern

May 2025 – July 2025

- Developed **SWICenter** using **Microsoft Power Apps & Power Automate**, empowering maintainers and contractors to update documentation efficiently, improving process **transparency**, accessibility, and **efficiency**. Changes in the HR system through 80+ Standard Work Instructions, transforming a manual process into a centralized, scalable system.
- Built an **AI-powered SharePoint Agent** to help users locate and understand relevant documents, enhancing task accuracy.

MSU Artificial Intelligence Club

East Lansing, MI

Workshop Coordinator & Executive Board Member

April 2025 – Present

- Orchestrated **weekly workshops** with interactive demos at the largest **Computer Science club at MSU** (1,500+ members) with topics such as Retrieval Augmented Generation, Vision-Language-Action models, MCP and Agentic AI.

NASA (L'Space Proposal Development)

Tempe, Arizona

Project Manager

August 2025 – Present

- Authored technical proposal for NASA evaluation on **multi-agent** task delegation and **collaborative architecture** for autonomous spacecraft maintenance through robotics; researched **ML/AI coordination** algorithms.

Projects

AutoSched | *Tailwind CSS, JavaScript React, OpenAI API, Tesseract OCR, Google Calendar API* | **1st @ Code Green Hackathon**

- Built a **web-based application** allowing students to upload syllabi, screenshots, and flyers to automatically extract lectures, exams, and office hours. Integrated with **Google Calendar API** for one-click sync, reducing manual scheduling time by 85%.

Michigan Logistics Case Study | *Python (Jupyter, Pandas, Matplotlib, XGBoost), Excel, Power BI* | **1st @ Broad Datathon (\$1250)**

- Used XGBoost to determine variables with most impact; Used Python's Pandas and Matplotlib to analyze and create graphs. Identified and recommended multi-carrier route optimization, unified data API, and customized training programs.

AI-Driven Music Translation Platform | *Next.js, FastAPI, Python, Docker, Monaco Editor, Ruby*

- Developed Python compiler translating musical parameters into executable Ruby code; architected RESTful API with FastAPI connecting frontend editor, code generation module, and Dockerized audio runtime.

Frameworks & Technologies

Frameworks & Technologies: Python, Java, JavaScript, MongoDB, Node.js, React.js, Flask, Linux, Microsoft Azure (AZ-900), Databricks, Power Automate, Power Apps, Power BI, SQL, Splunk, Git, Jira, HTML, CSS