

Sami Veliu

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EDUCATION

Michigan State University

Bachelor's of Science in Computer Science, *Minor* in Business

Expected Graduation: April 2026

GPA: 3.85

PROJECTS

Machine Learning Diabities Risk Analysis Tool (DRAT)

January-March 2024

- Natural Language Processing model (NLP) to data-scrap patients' user profiles. Uses tree-based classifiers to determine risk factors based on 10+ scientific markers of increased diabetes risk(ie: Triglycerides Level, Age, and Number of Pregnancies).
- Utilize a PostgreSQL database to store data, adapted through Python using psychopg2 API to train AI model based upon data retrieved in database.
- 82% accuracy rate in the detection of elevated risk in developing diabetes based upon patients using this model.

Expense Tracking System (\$125,000 in real-world Application)

April-June 2024

- Admin-focused Expense Tracking system to manage spending and budget reports for custom projects within an organization. Easily create, manage, and upload new "projects" to users within your organization; while internally setting a budget. Quickly import/export expenses to better understand spending allocation for each project.
- Utilized HTML, CSS, JavaScript, and React for a user-friendly interface. Utilized PostgreSQL to store data for user spending and projects. Implemented Node.js to create RESTful routes for user authentication and project management, and connected front-end HTTP requests to the backend using the Fetch API.
- \$125,000 is tracked currently to monitor the spending/allocation of resources raised by my organization (Spartan Food Security Council) to feed our local community who don't have access to quality food resources.

Real-Time AI Automotive Sensor Monitoring Tool

July-August 2024

- Captured live data feed from any automotive vehicle using an OBD-II port scanner to input information such as MPH, RPM, and breaking pressure. Relayed this information into a live data crunching system which would monitor the incoming data and give a live analysis of user driving habits and safety rating.
- Provided user information such as "hard breaking" or "intense acceleration" when detected. Each alert is tracked and compared against the number of miles the user has driven to gauge the safety rating of this user's driving habits per mile driven. (0.0 unsafe - 10.0 safe).
- Scikit-learn API used to monitor live incoming data feed from the OBD-II port and create analysis from the RPM, Brake Pressure, and MPH delta. Matplotlib is used to take analyzed data and visualize it to display spikes/dips in data being tracked along with PostgreSQL to store incoming data.

LEADERSHIP

Spartan Food Security Council | **President**

April 2024 - Present

- Partnered with Representative Jenn Hill to raise and pass a governmental grant program that provided \$125,000 to Spartan Food Security Council through MSU to propagate the creation of new programs to better feed and address college hunger for underprivileged students.
- Introduce Bill #5097 (Hunger-free Campus Bill) into the House of Representatives to establish funding for University Food Insecurity Programs State Wide.
- Organize and Manage Student groups of over 100 people to facilitate large-scale volunteer activities.

TECHNICAL SKILLS

Languages: Python, Java, HTML/CSS, Javascript, C++, PostgreSQL

Developer Tools: Github, MongoDB, React, VSCode, XCode, PyCharm, pgAdmin,

Technologies: AWS, Microsoft Azure, Microsoft Excel, PowerPoint