

Troy Williams

U.S. Citizen | Detroit, MI | will3645@msu.edu | linkedin.com/in/troy-williams-c313

SUMMARY

Ambitious and poised Software Professional with a background in Java, C++, Python, and mobile application development. Specialties include: Object-Oriented Programming, Backend Development, Problem Solving, and Debugging.

EDUCATION

Michigan State University

Bachelor's of Science in Computer Science

East Lansing, Michigan

| Aug 2025

- Related Coursework: Algorithm Engineering, Software Engineering, Object Oriented Software Design, Computer Graphics, and Database Systems.

EXPERIENCES

RPM

Software Engineering Intern

Birmingham, Michigan

| May 2025 – Aug 2025

- Designed and developed an event-driven system to handle **100,000+** daily data records flowing across multiple services.
- Built scalable pipelines using **Apache Kafka** Streams and **Java**, ensuring reliable delivery of data records.
- Improved data flow and management for RPM's Transportation Management System, reducing latency of data transfers.

PROJECTS

Automated Vehicle Damage Logger

Full-Stack Developer

East Lansing, Michigan

| May 2025

- Worked on a team of six as a full-stack developer to design and implement an end-to-end **Machine Learning** Vehicle Damage Logging System.
- Developed **backend API** routes to securely handle vehicle reports in a database system hosted by Microsoft Azure.
- Built a multi-page **React** application for managing employee data, including an analytics dashboard that displays dynamic data.
- Reduced drivers' manual workload by replacing manual reporting with photo-based damage reporting in the app.
- Project was awarded the **MSU Federal Credit Union Praxis Award** for Best Technical Team – recognizing the most technically challenging and well-executed system.

Bite Book

Android Developer

East Lansing, Michigan

| Apr 2025

- Developed an **Android application** in **Java** to monitor and track food waste for college dorms.
- Utilized **Firebase** with the Android app for backend support enabling user authentication and data storage.
- Reduced weekly grocery waste by **25%** lowering weekly grocery spending.

Spartan Hero

C++ Developer

East Lansing, Michigan

| Jan 2024

- Created a game inspired by Guitar Hero, where players match keys with falling notes that sync with music.
- Developed the game in **C++** using **object-oriented** design patterns to structure game components.
- Built as a project to provide an interactive way to relax between regular coursework.

ACTIVITIES AND AWARDS

Detroit MADE

Peer Mentor

East Lansing, Michigan

| Aug 2021 – Sep 2023

- Provided support to first-year Metro Detroit students by serving as a mentor to ensure a successful college transition.
- Collaborated with undergraduate students through tutoring to encourage students to become more intentional learners.

SKILLS AND INTEREST

Programming: Java, C++, Python, Web Langs (JS, TS, HTML, CSS), SQL, NoSQL

Tools: Git, Android Studio, Visual Studio Code, Apache Kafka, Postman

Platforms/Frameworks: Windows, MacOS, Firebase, React, Android SDK, OpenGL, Fast API

Interests: Volleyball, Anime, Hiking, Reading