Chase Guelette

East Lansing, MI | chaseguelette@gmail.com | 810-210-0313
https://www.linkedin.com/in/chase-guelette/ | https://github.com/ChaseGuelette

Education

Michigan State University, College of Engineering   East Lansing, MI
B.S.E in Computer Science, Minor in Business Innovation   August 2023 - May 2026
Awards: Honors College, Honors Excellence Scholarship, Deans List
Relevant Coursework: Computer Organization & Architecture, Algorithms & Data Structures, Object-Oriented Software Design, Information Management and the Cloud

Skills

Programming Languages: Python, C++, Java, JavaScript, HTML/CSS

Tools/Technologies: React.js, ReactNative, Tailwind, Flask, PyQt, Flutter, Raspberry PI, AWS

Software: GitHub, Git, Docker, Vercel, Appwrite, Google and Microsoft Suite(Excel, Sheets, Docs, Word, etc.)

Relevant Experience

Robotics and Intelligent Vehicle Automation Lab (RIVAL)   August 2024 - Present
Research Assistant – Michigan State   East Lansing, MI
- Implementing improved **GUI** – using **React.js** to recreate **PyQt GUI** for robot operation, using **ROS** and optimizing computer **vision model** for fruit detection. Overhauling **Machine Learning model** to expand detection for fruit classes

Inner Voice AI   July 2024 - Present
Software Developer
- Built interactive AI therapist using **Hume.ai**, **OpenAI API/OpenAI Whisper** for real time voice assistance. Used **SQL/Firebase** for user data storage/AI memory. Incorporated **Flask** for backend and **React.js** for responsive frontend
- Revamped backend for functionality on mobile. Built **Android** and **iOS** app with **React Native** and **Tailwind CSS**. Rebuilt portions of the backend with **Appwrite**, increasing response speeds by **30%**

AI Club at MSU   August 2023 - May 2024
AI Systems Developer   East Lansing, MI
- Built Fit Finder-AI, a Tinder for Clothes **android** and **iOS** app with a **Flask** backend and **React Native** frontend. **OpenAI** powered clothing choices and **Firebase/SQL** for data storage.
- Learned AI and Machine Learning concepts through guided mini projects using skills such as: Linear/Logistic Regression, Testing/Training Data, and **Neural Networks**. Gained Experience with **API** calls and **Hugging Face** Models

Spicer Orchards   May 2017 - August 2024
Team Lead, Machine Operator   Fenton, MI
- Managed **15+ employees** across 3 departments, spearheaded restructuring of facilities leading to improved efficiency and **25,000$** in increased profits. Facilitated land repurposing leading to **$50,000** in new fruit plantings and a **50%** increase in profitability.
- Led **10+ employee** picking team, improved fruit picking rates by **40%**. Restructured pesticide spray routes and found eco conscious alternatives to previous options, leading to a **25%** higher survival rate in **47 a**pple varieties

Projects

Recycle Scout – AI for Change Hackathon
Ranked Top 3 in 190+ Projects
- Engineered full stack app integrating an AI model for recycling optimization using **Python**, **Flask**, and **Pandas**. Used **Folium** for advanced AI graph embeddings, and **HTML/CSS** for UI. Utilized **AWS LightSail** for hosting