EVAN FIORITTO

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Summary

Aspiring Software Engineer with experience in full-stack development, machine learning, and automation. Skilled in Python, C++, Java, and React, with hands-on experience in web scraping, NLP, and real-time data processing. Proven ability to integrate AI, optimize workflows, and develop interactive applications through research and hackathon projects. Seeking a software engineering internship to apply technical expertise and problem-solving skills in impactful projects.

Education

Michigan State University, College of Engineering, East Lansing MI

Aug 2022 - May 2026

Bachelor of Science, Computer Science; Concentration in Software Engineering, Minor in Information Technology

• Achievements: Member of Honors College

Work Experience

Michigan State University

May 2024 - Nov 2024

Research Assistant II

Remote, based in East Lansing MI

- Developed a Python-based web scraping pipeline using Selenium to automate bulk data collection from financial databases, improving data retrieval efficiency.
- Implemented NLP and OCR techniques with PyMuPDF, docTr, and icgauge to extract, verify, and analyze textual data from PDFs, enhancing data accuracy.
- Designed and maintained structured data pipelines using pandas, scikit-learn, and SQL-like CSV processing to track, validate, and process large datasets.
- Optimized file handling and automation scripts, ensuring robust error handling and seamless reruns for large-scale data collection and analysis.

Projects

thereMINI | Wearable MIDI Controller

Spartahack X Feb 2025

- Designed and implemented an accessible, motion-based MIDI controller using the FREE-WILi device, enabling intuitive one-handed music creation through hand gestures.
- Developed a real-time sensor-to-MIDI pipeline by processing accelerometer data with C++, C, and Python, sending through serial data and integrating it with loopMIDI and DAWs like Ableton.
- Optimized signal processing and ergonomic mapping of hand movements to pitch, volume, and note selection, ensuring precise and intuitive
 musical control.
- Overcame hardware-software integration challenges by refining data transmission, filtering accelerometer noise, and troubleshooting USB connectivity between WSL and Windows.

VelocIT | *Mobile Career Fair Optimization App*

MHacks 2024 Oct 2024

- Developed a React Native application using Expo and Firebase to enhance career fair networking through geolocation-based recruiter discovery.
- Integrated Groq AI to generate personalized conversation starters and career insights, improving user engagement and follow-up actions.
- Overcame platform limitations by adapting iOS development to Windows PCs, utilizing Expo Go and Firebase for seamless cross-platform functionality.
- Implemented real-time location tracking with Expo-location and Firebase to connect users with nearby recruiters, replacing an initial Bluetooth Low Energy (BLE) approach.

CarbonCount | Competitive Emissions Tracker

Grizzhacks 6 Feb 2024

- Developed a Node.js backend integrating Google Maps API, Kintone, and Auth0 to track and analyze users' carbon emissions from personal transportation.
- Designed a real-time leaderboard system that dynamically updates user scores based on transportation choices, fostering engagement through competition.
- Overcame challenges with new technologies by learning and implementing Kintone, Google APIs, and Auth0 despite limited documentation and prior experience.
- Gained experience in API integration and user-focused design, creating an interactive platform that encourages sustainable transportation choices through gamification.

Skills

• Embedded Software Development, Object Oriented Programming, Web Design, Rest APIs, Multithreading, Software Architecture, Python, C++, Java, Typescript, SQL, HTML/CSS/JS, Assembly, React

Achievements

Spartahack X Winner GrizzHacks 6 Winner SpartaHack 9 Winner John K Welch Endowed Scholarship Michigan Competitive Scholarship MSU Design Day EGR 100 Winner Dean's List