VICTOR TYLER JR

734-999-2924 | LinkedIn | mr.tyler97@hotmail.com | Portfolio

EDUCATION

EASTERN MICHIGAN UNIVERSITY Ypsilanti, MI
Bachelor of Arts, Computer Science December 2025

SKILLS

Languages: Python, TypeScript, JavaScript, Java, Swift, C, C++, C#
Databases: MySQL
Frameworks/Libraries: SwiftUI, PyTorch, TensorFlow, Streamlit, React, React Bootstrap, Express, Node.js, Electron, Vitest
Development Tools: GitHub, Visual Studio Code, Xcode, Eclipse, Microsoft Office, Arduino IDE
Cloud/Platforms: AWS (EC2, Lambda), Linux (Ubuntu) , macOS, Windows

WORK EXPERIENCE

HONEYWELL Charlotte, NC
Software Engineer Intern | Full-Stack (React, Bootstrap, Streamlit, Typescript, Python, Linux) June 2025 – August 2025

- Developed a **full-stack** application that consolidated multiple database configuration workflows into a single interface, eliminating manual reconfiguration processes and accelerating trade show demo deployment by **75%**
- Researched multiple tech stack options, created detailed **wireframes**, and architected the project as a monorepo to enable future mobile integration and code reuse for **scalable development**
- Built a configuration management system with real-time validation, unique ID checks, and error handling, ensuring reliable demo configurations and **data integrity** across multiple trade show scenarios
- Optimized **ML/AI** deployment application by resolving Python dependency discrepancies, enhancing Streamlit UI components, and creating comprehensive documentation with updated requirements

EASTERN MICHIGAN UNIVERSITY Ypsilanti, MI
Research Assistant | Framework Creation for Department of Chemistry (Python, Linux) | GitHub Aug 2024 – April 2025

- Developed a Linux-based pipeline in **Python** to simulate and analyze autophagic vacuoles, improving research efficiency and boosting workflow speed by **20%**
- **Automated** the pipeline and optimized CompuCell3D parameters, enhancing simulation speed and accuracy, leading to more reliable outputs

EASTERN MICHIGAN UNIVERSITY Ypsilanti, MI
Teacher Assistant & Grader | Intro to Programming & Programming Data Structures (Java) Aug 2023 – April 2024

- Explained data structure functions and proper code etiquette to students improving their understanding of data structure logic, **object-oriented programming**, and algorithm efficiency

PROJECTS

KEEP OR DELETE

- As **Team Leader** for a six-developer group, I led the development of a cross-platform desktop application that streamlines file management—enabling directory selection, preview, renaming, and deletion. I also integrated a context-aware **AI assistant** for renaming and actively contributed to **sprint planning**, **software architecture design,** core feature integration, UI design, **API integration**, resolving merge conflicts, and writing **unit tests**. (JavaScript, Electron, Node.js, CSS, HTML, Chat GPT API, AWS Lambda, Playwright) | *Website*

BILL SPLITTER iOS APP

- Built a **native** iOS application for calculating bill splits and tip amounts using **SwiftUI's** framework and iOS design patterns. This application includes data binding, user input handling, dynamic keyboard management, and localized currency formatting. (SwiftUI, Swift, Xcode)

EMBEDDED ML MODEL – REAL TIME LED CONTROL

- Designed and **trained** a **multi-layer perceptron**; converted it to a space efficient **TensorFlow Lite** model and deployed it on an Arduino Nano 33 BLE Sense board for real-time pulse-width modulation LED control. (Python, C++, TensorFlow, Matplotlib, NumPy, Pandas)

LEADERSHIP EXPERIENCE

National Society of Black Engineers | Vice President Sept 2024 – April 2025

- Forged partnerships with companies to coordinate events and trips, improving opportunities for NSBE and EMU students