VICTOR TYLER JR

<u>LinkedIn</u> | mr.tyler97@hotmail.com | Portfolio

EDUCATION

EASTERN MICHIGAN UNIVERSITY

Bachelor of Arts, Computer Science

Ypsilanti, MI December 2025

SKILLS

Languages: Python, TypeScript, JavaScript, Java, Swift, MySQL, C, C++, C#

Frameworks/Libraries: SwiftUI, PyTorch, TensorFlow, Streamlit, React, React Bootstrap, Express, Node.js, Electron

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 for dynamic database generation and reconfiguration, streamlining trade show demo workflows
- Researched multiple tech stack options, created detailed **wireframes**, and architected the project as a monorepo, enabling future mobile integration and shared business logic for **scalable development**
- Implemented JSON database management functionality 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, GitHub) | <u>Website</u>

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 and collaborated with other club leaders to coordinate events and trips, improving opportunities for NSBE and EMU students | *Event*
- Led weekly meetings focused on event planning, funding, and student retention