# VICTOR TYLER JR

LinkedIn | 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, 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 202

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

### **COFFEE REST**

• Developed a **machine learning** sleep optimization app for **iOS** devices. It features a custom-trained model that analyzes wake-up time, sleep duration, and caffeine intake to predict an optimal bedtime. (CreateML, CoreML, SwiftUI, Swift, Xcode) | *GitHub* 

#### 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