VICTOR TYLER JR

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EDUCATION

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

SKILLS

Languages: Python, TypeScript, Swift, JavaScript, Java, C, C++, C#
Databases: MySQL
Frameworks/Libraries: React, SwiftUI, CoreML, CreateML, Vision, PyTorch, TensorFlow, Streamlit, Bootstrap, 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 that consolidated multiple database configuration workflows into a single interface, eliminating manual reconfiguration processes and **accelerating** Honeywell's 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
- Collaborated **cross-functionally** with engineering teams to optimize **ML/AI** deployment application by resolving Python dependency discrepancies, enhancing Streamlit UI components, and creating comprehensive documentation

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 **30+** students improving their understanding of data structure logic, **object-oriented programming**, and algorithm efficiency

PROJECTS

PASTRIES

- Developed a native **iOS** application with a custom trained **ML** model (**92%** test accuracy) that enables real time pastry **classification** through camera integration. Curated an original dataset by collecting images from **10+** local bakeries and online sources. Architecting the app to securely fetch macronutrient data through a **proxy server** and integrating **MapKit** for nearby bakery discovery. (*Swift, SwiftUI, CreateML, CoreML, Vision Framework, MapKit, Lambda, Node.js, RESTful APIs, Xcode*) | *Github*

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*

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*)