

John Akinmolayan

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Qualifications

Professional Experience

Computer Vision Research Intern | May 2023 — August 2023

U.S. Army DEVCOM Army Research Laboratory – Adelphi, Maryland

- Collaborated with team members under the guidance of a PhD mentor to develop and integrate advanced computer vision models.
- Integrated state-of-the-art computer vision models using transformers into the autonomy stack.
- Enhanced the Global Tracking Transformer model with real-time capabilities, achieving a 20% improvement in accuracy compared to the previous version.
- Added a panoptic segmentation model into the Autonomy stack.
- Conducted comprehensive integration and testing of ARL's Warthog and Husky robotic platforms, ensuring optimal performance and reliability.

Education & Certification

Bachelor of Science in Computer Science August 2021 | May 2025

University of Maryland, Baltimore County (UMBC) Baltimore, MD

Projects

- **EZ-COMMERCE WEBAPP(Backend):**
 - Developed an e-commerce platform tailored for college students in collaboration with a team using GitHub.
 - Designed and implemented the backend with FastAPI, integrating it with an SQLite database and a React-based frontend.
 - Managed team workflows, task delegation, and backlog tracking using JIRA, ensuring on-time delivery.
- **Personal Portfolio website:**
 - Developed a responsive and interactive personal portfolio website using React, TypeScript, and Vite.
 - Implemented modern UI/UX design principles for a seamless user experience, showcasing projects and technical skills.
- **DR. Diagnosis:**
 - Collaborated in a team environment using GitHub to build three cardio-vascular disease detection models (Naïve Bayes, Logistic Regression, Multilayer Perceptron) with a 75% accuracy.
 - Extended the model to predict chances of diabetes with a 75% accuracy.
- **CPU Emulator(Z80)**
 - Wrote a CPU emulator for the Z80 CPU in C, implementing Fetch, Decode, and Execute cycle and key instruction sets.

Relevant Skills

- **Programming:** Python, R, SQL, SQL-LITE, Java, C++, C#, HTML, CSS, Typescript, and PHP.
- **Framework:** React, FastAPI, Tensorflow, Pandas, Pytorch.
- **Operating Systems:** Windows 8/10, and Linux.
- **Software:** Visual Studio Code, RStudio, Microsoft Office Suite, Wireshark, VirtualBox ROS, Docker JIRA.