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 along with team members, under the supervision of PHD mentor on computer vision models.
- Integrated state-of-the-art computer vision models using transformers into the autonomy stack.
- Integrated a multi-object tracking model (Global Tracking Transformer), and 20% higher accuracy in comparison to the previous model.
- Added a panoptic segmentation model into the Autonomy stack.
- Conducted comprehensive integration and testing on ARL's Warthog and Husky platforms.

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.
- Built and connected the backend (FastAPI) and database (SQLite) to the React-based frontend.
- Managed task delegation and backlog tracking using JIRA.

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.
- Optimized for performance with Vite, achieving fast build times.

• 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 operations.

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.