Folusakin Abiola

Columbus, Indiana • <u>folusakin01@gmail.com</u> • (516) 476 - 1611 • https://github.com/Folusakin

SUMMARY

Results-driven Software Engineer with a Bachelor of Science in Computer Engineering, boasting a strong background in C/C++ programming, embedded systems, and software development for real-time applications. Eager to contribute to cutting-edge projects, leveraging robust technical skills and a track record of innovative problem-solving.

EDUCATION

Texas Tech University, Lubbock, Texas

Bachelor of Science in Computer Engineering

Minor in Mathematics

WORK EXPERIENCE

Encrypted Communication and Diagnostics for ECMs

Cummins Inc., Columbus, Indiana

Embedded Cybersecurity Engineer

June 2022 – August 2022

GPA: 3.7

- Developed UDS encryption sequences in C/C++ ensuring secure ECU communication and diagnostics.
- Streamlined communication between ECU and diagnostic tools by managing application and transport layers.
- Leveraged Git for version control, enhancing team collaboration and productivity.

CSAR Bootloader Team

Cummins Inc., Columbus, Indiana

Embedded Software Engineer

January 2023 – Present

- Develop new bootloader software for ECMs, including for prototyping and production software.
- Evaluate errata items to determine possible improvements to the bootloader implementation.
- Implement various improvements to the bootloader code base.
- Responsible for releasing new software versions following necessary codebase modifications and updates.

ROJECTS/RESEARCH EXPERIENCE

Hexcellent Watch

ECE Project Lab III, Texas Tech University

Software Development Engineer

August – December 2021

- Developed a multifunctional health monitoring watch application in Swift, integrating calorie and water intake tracking, and heart rate monitoring.
- Created a user-friendly application GUI using Xcode, synthesizing functionality with design for an intuitive user experience.

Real-time Co-Pilot

Independent Project

Software Engineer

November 2023

- Engineered a Python-based real-time audio processing system by leveraging Azure Speech Services and OpenAI's GPT models.
- Deployed a docker container on HuggingFace to serve as a reverse proxy for the OpenAI API
- Set up an Azure function for issuing time-limited authentication tokens for speech recognition.
- Achieved sub-2-second end-to-end latency, ensuring seamless real-time interactions.
- Pioneered a transcription system capable of acting as a co-pilot in interviews and conversations, enhancing user experience.

SKILLS

- o **Programming Languages**: Proficient in C/C++, Python, Java, Swift, with experience in Verilog.
- **Embedded Systems**: Expertise in microcontroller programming and embedded software development.
- o **Communication**: Strong written and verbal skills, adept in technical documentation and teamwork.
- o **Tools**: Proficient with Git for version control and collaboration.
- o **Image Processing**: Skilled in using OpenCV for image analysis and processing applications.
- o **Backend Engineering**: Limited familiarity with backend development