Folusakin Abiola

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SUMMARY

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

EDUCATION

Texas Tech University, Lubbock, Texas
Bachelor of Science in Computer Engineering   **GPA: 3.7**
Minor in Mathematics

WORK EXPERIENCE

Encrypted Communication and Diagnostics for ECMs
Cummins Inc., Columbus, Indiana
Embedded Cybersecurity Engineer   June 2022 – August 2022
- 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 all ECMs, including for prototyping and production software.
- Evaluate and implement errata items determined to be applicable to the bootloader, preventing vulnerabilities and inefficiencies.
- Implement new memory map architecture for new generation ECMs with different flash memory configurations.
- Responsible for software release 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

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