Austin Jones

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Objective: Software Engineer with experience in Embedded Software and Cloud Development looking for cool problems to solve. Currently looking for employment starting Dec 2023.

Skills

Cloud Technologies: Docker, K8s, AWS, GitHub Actions, Postgres

Embedded Technologies: ARM MCUs, Xilinx FPGAs/MPSoCs Project Management: GitHub, GitLab, Jira, Confluence, Agile

Languages: C, Rust, C++, Go, Shell, Python, VHDL

Education

University of Tennessee Knoxville

Bachelor of Science in Computer Engineering

GPA: 4.0/4.0

Graduation: Dec 2021

Dec 2021 -Aug 2019

Engineering Professional Practice Office - University of Tennessee Student Ambassador

Assist UT engineering students to improve resumes, interview/inter-personal skills, and overall professional skills. Work with other ambassadors to facilitate networking events and career fairs.

Work Experience

Nov 2023 -

PolySign - Remote

Jan 2022

Collaborated with many teams across multiple products and technologies to build out features and products for a Digital Asset Custodian in the quickly evolving Cryptocurrency market.

Senior Software Engineer: Jan 2023 - Nov 2023

- Contributed to Escrow feature of Python microservice backend to meet new customer requirements:
 - Redesigned feature data model and control flow to increase robustness.
 - Designed a new data flow to allow for more flexibility in the feature.
- Implemented an end-to-end POC for an unreleased feature across multiple
- Worked on legacy C/Rust codebase to support features in other products.
- Performed monthly Dev-on-Call rotations debugging live issues across multiple environments including: dev, testing, pre-prod, and prod.
- Planned, hosted, and participated in a company wide Hackathon.
- Organized and hosted a weekly engineering reading club.

Software Engineer: Jan 2022 - Dec 2022

- Helped stand up a green field project in Rust aimed at performing fast, distributed multiparty compute signing:
 - Designed fully asynchronous architecture for distributed message signing increasing efficiency and robustness.
 - Overhauled network stack to use Tokio's Tonic gRPC over VirtioVsock Sockets increasing dev velocity and code cleanliness.
 - Redesigned CI/CD Pipeline to minimize redundancy in builds, regression testing, and integration testing.
 - Integrated with main product as a POC.

Aug 2021 -May 2021

Garmin International - Olathe, KS

Embedded Software Intern

Developed code for microcontroller to control power on logic for an unreleased product.

- Utilized MCU to monitor main board status and determine the power state of the board.
- Referenced PCB schematics and MCU documentation to integrate software and hardware.
- Gained strong familiarity with ARM/STM microcontrollers.

Nov 2021 -Jan 2019

Siemens Molecular Imaging - Knoxville, TN

Electrical R&D Intern

Conduct projects, both individually and collaboratively, to provide value to the ER&D team:

- Presented findings from work to a large technical audience to demonstrate the validity of a new system architecture.
- Long term projects:
 - Utilize a Xilinx MPSoC to test limitations of ARM Core processing vs an FPGA implementation to assess cost reductions.
 - Used multiple Raspberry Pis with off the shelf networking hardware to conduct data path tests and compare the bandwidth with current custom solutions.
 - Work with a team of engineers using GitLab to write various driver code for a custom Linux image.
 - Developed Firmware, Embedded Software, and Application Software for a unit test fixture that is used during production of PET electronics.
 - Collaborated with a fellow intern to build a GUI Application that monitored and report the status of and entire system including all sub-assemblies.
- Assist engineers with general tasks (e.g. wiring, testing, Python scripts, documentation).

Interests and Hobbies

- Custom Mechanical Keyboards, Basic Electrical Projects, Competitive Programming
- Chess, Go, Reading, Cooking
- Rock Climbing, Cycling, Specialty Coffee