Austin Jones

Address: 201 S Central St, Knoxville, TN – Phone: 615-962-3732
Email: ajone239@vols.utk.edu – GitHub: https://github.com/ajone239

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

Education

University of Tennessee Knoxville	Graduation: Dec 2021
Bachelor of Science in Computer Engineering	Gpa: 4.0/4.0

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 Jan 2022	**PolySign** - Remote *Senior Software Engineer* Collaborated with many teams across multiple products and technologies to meet the often changing needs of the Crypto Market.

- 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.
  - Overhauled network stack to use Tonic gRPC over VirtioVsock Sockets.
  - Redesigned CI/CD Pipeline to minimize redundancy in builds, regression testing, and integration testing.
  - Integrated with main product as a POC.
- Contributed to Python microservice backend:
  - Redesigned feature data model to increase robustness.
  - Designed a new data flow to allow for more flexibility in the feature.
  - Found, ticketed, and worked on tech debt as it was found.
- Implemented an end-to-end POC feature across multiple projects.
- 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 an engineering reading club.

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