

Austin Jones

ADDRESS: 201 S Central St, Knoxville, TN – PHONE: 615-962-3732

EMAIL: ajones53.aj@gmail.com – 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, gRPC, 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

Graduation: Dec 2021

Bachelor of Science in COMPUTER ENGINEERING

GPA: 4.0/4.0

Graduated top student of the John D. Tickle College of Engineering.

DEC 2021 - **Engineering Professional Practice Office** - University of Tennessee

AUG 2019 *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 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 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 for multi-repo project 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 <i>Embedded Software Intern</i> Developed code for microcontroller to control power on logic for an unreleased product. <ul style="list-style-type: none"> 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 <i>Electrical R&D Intern</i> Conduct projects, both individually and collaboratively, to provide value to the ER&D team: <ul style="list-style-type: none"> Presented findings from work to a large technical audience to demonstrate the validity of a new system architecture. Long term projects: <ul style="list-style-type: none"> 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).

Personal Projects

JAN 2021	Light Sign with Web Server Control - Personal Project Controlled an LED Array to display text specified on a web page. Custom web server written in Rust hosted control page and sent data over UART. Arduino received UART data and displayed data on LED Array.
APR 2019	Password Manager Browser Extension - University of Tennessee <i>Data Structures and Algorithms Final Project</i> Collaborated with a group of peers to create a functional Chrome extension that manages a user's passwords for multiple sites.
APR 2019	Render Component for Firmware Based Pong - University of Tennessee <i>Digital Systems Design Final Project</i> Reimplemented the retro game Pong on an FPGA using VHDL. Component was implemented to read the game state and render all game objects and scores.

Interests and Hobbies

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