

Austin Jones

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Objective: Computer Engineering Senior looking for full time position for Jan 2022. Interested in working with Embedded Systems, Operating Systems, IoT, and Networking.

Skills

Working Knowledge: POSIX, Xilinx MPSoCs/FPGAs, Petalinux, Intel FPGAs, ARM MCUs
Professional Languages: C++, C, C#, Python, Shell, VHDL
Recreational Languages: Rust, Haskell, BF
Office Skills: Excel, GIMP, Git, Gerrit, Visio, L^AT_EX, Markdown, Groff

Education

University of Tennessee Knoxville Anticipated Graduation: Dec 2021
Bachelor of Science in COMPUTER ENGINEERING GPA: 4.0/4.0

Current | **Engineering Professional Practice Office** - University of Tennessee
AUG 2019 | *Student Ambassador*
Assist UT engineering students to improve resumes, interview/inter-person skills, and overall professional skill. Work with other ambassadors to facilitate networking events and career fairs.

Work Experience

Current | **Garmin International** - Olathe, KS
MAY 2021 | *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.

MAY 2021 | **Siemens Molecular Imaging** - Knoxville, TN
JAN 2019 | *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.
 - Developed Firmware, Embedded Software, and Application Software for a unit test fixture that is used during production of PET electronics.
- Assist engineers with general tasks (e.g. wiring, testing, Python scripts, documentation).

Personal Projects

Smart Mirror - Python, Raspberry Pi

Built a mirror with a monitor and Raspberry Pi behind 2-way glass. Forked a Smart mirror repo to add custom features. Fabricated frame and assembled the Mirror with friends.

Light Sign - Rust, Raspberry Pi, Arduino

Created a light sign with a that would display text input from a webserver on the sign. Rust application, on Raspberry PI, ran custom webserver and spoke to the Arduino. Arduino read in over UART and displayed text on the LED matrix sign.

Add board support for Custom Keyboard to Custom Firmware - C, ZMK

Added support for the Reviung 39 (custom keyboard) to the ZMK wireless keyboard firmware.

Interests and Hobbies

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- Raspberry Pi, Arduino, Self-Hosting, IoT Projects, 3D Printing
 - VolHacks, Custom Mechanical Keyboards, Basic Electrical Projects
 - Rock Climbing, Cooking, Specialty Coffee, Digital Art