

# Austin Jones

ADDRESS: 201 S Central St, Knoxville, TN

PHONE: 615-962-3732

EMAIL: [ajones53.aj@gmail.com](mailto:ajones53.aj@gmail.com)

GITHUB: <https://github.com/ajone239>

November 28, 2023

Dear Hiring Manager,

I am writing you to apply to the Embedded Systems Hardware and Software Engineer position at the Oak Ridge National Laboratory. I've been working in industry for about 2 years now, but I've nearly 5 years of engineering experience given the work I did in internships. I have always enjoyed the marriage of hardware and software in a way that brings out the best performance in both. I've always preferred using systems languages: I learned to program in C++, cut my developer teeth in C, and now use Rust as my primary language. Working at the edge of hardware and software to take on all the varied and interesting challenges put up by the research at the lab makes me excited to apply for this role.

At the University of Tennessee Knoxville, I gained a fundamental basis of embedded software and the best practices of Embedded Software Development. These practices were further reinforced in my internships. At Siemens, I worked on many projects ranging up and down the stack. From GUI test applications to FPGA firmware, I had my hands in many long term projects; some of which are likely still in use. Consequently, I was also responsible for presenting and communicating my work/findings, requiring effective understanding and organization of ideas to show to audiences of varying technicality. At Garmin, my efforts were more focused. In a summer, I became very acquainted with a particular model of STM ARM microcontroller and used it to write the power-on logic for a new product. My sole responsibilities were to realize this software, but it involved communicating with the rest of the team, reading chip specs, much code review, and using schematics to inform firmware decisions.

My time in industry was spent on much higher level software. At Polysign, I worked almost exclusively in the cloud, but this still yielded very transferable skills. As it was a start-up, I was often handed the reigns on designs or even full features. The fast and agile development process allowed for whole top-level designs to be usurped for better ones. Team cross talk and integration between teams wasn't common but vital to the bringing up features, products, or debugging production incidents. Technologies across the firms were new and abundant meaning that picking up a small task may also involve learning two or three new technologies and how to use them. This kept me on my toes for entering new projects, expecting nothing and turning to testing to get my footing.

Thank you for taking the time to read my application and considering me for this position. If you've any questions, feel free to reach me with the information above. I'm sure my mixture of skills and work ethic could be a great fit for this role.

Best, Austin Jones