

ANDREW K. DAVIS

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US Citizen Secret Security Clearance

Professional Summary

I am a VHDL FPGA Engineer with 5 years of industry experience. I have been both an individual contributor, and I have lead a small team of firmware engineers since the beginning of 2024. My work has been primarily Zynq Ultrascale+family of devices, with a focus on DAC/ADC RF Data Converter and 10GbE Ethernet IP.

Skills

- Languages: Python, TCL, VHDL (CocoTB Simulation, Hardware Integration)
- Standards: AXI4-Stream, AXI4-Lite, MORA, Ethernet II, UART, I2C, SPI
- Software: LATEX, Git, Perforce, MS Visio, Linux
- Hardware: Zynq US+ RFSoC (XCZU28DR:ZCU111, XCZU43DR, XCZU47DR), Zynq US+ MPSoC (XCZU9EG:ZCU101, XCZU7EV:ZCU106, XCK26:Kria K26), Artix US+ ()
- Functional: Mentorship, Tasking, Sprint Standups

Education

Clarkson University Potsdam, NY

May 2019

Bachelor of Science in Computer Engineering | 3.520 GPA

Undergraduate Research: 3D Fingerprint Scanning and Modeling

Created a prototype to scan and produce 3D renders of users fingerprints. Helped to develop an algorithm in C++ to project and unwrap the 3D renders into fingerprint rolls. Presented the prototype and research at the IARPA N2N Challenge 2017 in Laurel, Maryland.

Work Experience

SRC Inc Syracuse, NY

October 2023 - Present

Acting Lead Firmware Engineer

- Interview team member for the Firmware Engineering department; performed over 20 interviews, evaluating technical skill and a candidate's overall fit for the company and department.
- Act in a lead role to oversee a team of 2-3 engineers; lead daily standups and assign bi-weekly Sprint tasking.
- Act as the responsible individual for Functional Overview architecture and documentation.
- Oversee Detailed Design architecture and documentation, coding and simulation, and hardware integration.

SRC Inc *Syracuse, NY* Firmware Engineer

June 2019 - Present