Micah Jeffries

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SKILLS

- ASIC | SoC | Embedded Systems | Firmware | PCB | Full Stack | SCADA
- Verilog | SystemVerilog | Synthesis | Spyglass Lint | FEV | Synopsys | Cadence
- Python | C | C++ | Java | SQL | Git | Intouch | Ignition
- JavaScript | TypeScript | HTML | CSS | Node | Express | React | Angular
- Linux | GitHub | Jenkins | Jira | Confluence | Ethernet | Modbus

EXPERIENCE

Tesco Controls | Sacramento, CA 2024 – Current

SCADA Engineer 08/2024 – Current

- Designed **HMI** screens for water and wastewater treatment plants using Intouch and Ignition software platforms
- Developed scripts in **Python** and **SQL** to query databases of SCADA tags, manage alarm notifications and more
- Leveraged **Modbus TCP** to allow SCADA systems to communicate with PLCs and read from their registers

Hewlett Packard Enterprise | Roseville, CA 2021 – 2024

ASIC Design Engineer 06/2022 – 08/2024

- Reported to and collaborated with senior ASIC designers who develop enterprise-level **ethernet** networking switches of HPE's Intelligent Edge portfolio, driving $1.4 billion of revenue every year
- Designed the micro-architecture of the packet modifier and flexible engine **SoC** sub-blocks
- Led the RTL design and development of the packet modifier and flexible engine using **Verilog, SystemVerilog** and **C**
- Developed software tools for the flexible engine using **Python**
- Leveraged Synopsys and Cadence to **synthesize** and **lint** RTL designs

ASIC Design Intern 06/2021 – 09/2021

- Developed enhancements for the Linux command-line utility grep using **bash scripting**

The Lumenaris Group Inc. | Colfax, CA 2020 – 2021

Electrical Engineer Intern 06/2020 – 06/2021

- Completed multiple engineering projects for a local fabric store owner which eased the manufacturing process of various products using **PCB Design, Embedded Systems** and **GUI Development**

EDUCATION

California Polytechnic State University | San Luis Obispo, CA 08/2018 – 06/2022
Bachelor of Science in **Electrical Engineering** | **Computer Science** Minor | GPA: 3.804

PROJECTS

Digital Multimeter

- Developed the software written in **C** for a digital multimeter which leveraged the analog-to-digital (ADC) converter of the MSP432 microcontroller to measure the DC/AC voltages and frequency of an input signal

Function Generator

- Developed the software written in **C** for a function generator which utilizes SPI protocol to communicate with an external digital-to-analog converter (DAC) to generate various analog waveforms