RAYMOND LEE

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SKILLS

Hardware: Arduino • FPGA • Raspberry Pi • Oscilloscopes • Circuit/PCB Design
Software: Python • C/C++ • LT/NGSpice • KiCad • MATLAB • Quartus Prime

EDUCATION

Oregon State University **Sept 2020 - June 2024**
B.S. in Electrical & Computer Engineering

- **GPA:** 4.00 of 4.00
- **Minors:** Computer Science, Mathematics, Physics, Actuarial Science

EXPERIENCE

Application Engineer Intern | Tektronix **June 2022 - Sept 2022**

- Designed and built PCB for configurable filter and RF switch network
- Developed and updated scripts to be compatible with new oscilloscopes
- Improved success rate of bode plot script from 85% to 98% through timing
- Automated testing process for waveform transfer rate with Python script
- Presented and demoed oscilloscope features to 5+ potential customers

PROJECTS

DC Power Supply | Arduino

- Determined components that met power, resolution, and cost specifications
- Implemented code to allow user inputted SCPI commands to control system
- Built and verified that system met given accuracy and safety requirements

RF Switch Network | Raspberry Pi

- Created web application that controls transmission path routing of signals
- Debugged SPI protocol by viewing analog and digital signal on oscilloscope
- Designed circuit and PCB for 12 channel switching network with 6 paths each

Keyboard Piano | FPGA

- Designed middle octave piano using PS/2 keyboard and 50 MHz FPGA clock
- Created block/VHDL modules for decoders, clock dividers, and top diagram
- Simulated each module in ModelSim before physically implementing design

EXTRACURRICULAR

IEEE - Eta Kappa Nu **May 2022 - Present**

- Guided peers through problem solving process for homework/course work
- Explained engineering and mathematical concepts in simple/intuitive terms
- Determined areas of struggle and provided alternate approaches for solving