Rene Nagy

Corvallis, Oregon nagyr@oregonstate.edu 541-968-7825 in/rene-nagy

SUMMARY

Senior electrical and computer engineering student with a passion for advanced PCB design. A hard worker and a quick learner, I am always excited to learn new skills. I communicate and lead as part of a team to execute outstanding electrical projects on a short timeline. I am experienced with power, microcontroller, digital logic, and analog system design. From planning through manufacturing, the entire PCB design lifecycle is familiar to me.

EDUCATION

Bachelor of Science in Electrical and Computer Engineering (In Progress)
Oregon State University • Corvallis, OR • 2018-2022 • 3.93 GPA (As of summer 2021)

EXPERIENCE

Manufacturing Engineering Intern
Medline ReNewal **March 2021 - September 2021, Redmond, OR**

• Collaborated with cross-disciplinary teams to create robust medical device test fixtures that are easy to assemble and integrate both mechanically and electrically.
• Designed custom PCB to simplify an existing project's design, reducing size by about 25% and reducing cost by about 50%.
• Performed frequency domain analysis to diagnose a PCB's sporadic power system failure due to high frequency resonance on power input.
• Created custom Python script to automatically populate data from over 100 text files to a single Excel spreadsheet.
• Manufactured custom cables and assembled electrical boxes for industrial test fixtures using DIN rail mounted components.
• Created comprehensive, traceable, and repeatable documentation that conforms to the strict standards of an FDA regulated company.

Student Technical Assistant
Oregon State University Oceanography Lab **February 2020 - April 2020, Corvallis, OR**

• Managed and designed electrical systems for the Robotic Oceanographic Surface Sampler (ROSS), an autonomous research vessel designed to collect oceanographic data without the need for human operation.
• Redesigned electrical configuration to maximize ease of access and increase waterproofing.
• Constructed custom electrical solutions to improve ROSS functionality, durability, and continued performance without error.
• Job cut short due to lack of funding because of COVID-19.

INVOLVEMENT

Robotics Club: Mars Rover
Oregon State University • Electrical Team Lead • September 2018 - Present

• Learned skills for PCB design, routing, and manufacturing using Circuit Maker and SMD soldering.
• Gained experience writing and debugging firmware for serial communications using Arduino.
• Led projects for several PCBs, including the atmospheric node, science sensor node, pan-tilt node, and science mechanism node.
• Communicated with and designated tasks among team members to design and manufacture PCBs with short turnaround.
• Organized between teams and used time oriented goals in order to progressively improve the rover for competition.
• The OSU Robotics Club Rover Team competes in the Canadian International Rover Challenge, where we won first place in 2019 and third place in 2021.

SKILLS

PCB Design Software (Altium, Eagle)

Object Oriented Programming (C, C++)

Firmware Coding and Debugging

Time Domain and Frequency Domain Circuit Analysis

Advanced SMD Soldering