

AIDAN SHARPE

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ELECTRICAL AND COMPUTER ENGINEER

Growth-driven engineer with years of diverse programming & electronics experience. Led the avionics subteam of Rowan Rocketry to create student researched and developed avionics and recovery equipment, resulting in a successful launch and recovery at Spaceport America Cup 2024. As the Workshop Chair of the Rowan University IEEE Student Branch, I created and presented workshops to develop critical engineering skills of underclassmen in my major.

WORK EXPERIENCE

Industrial Hardware Development Intern Summer 2024
Inductotherm Corp. *Rancocas, NJ*

- Modernized a proprietary 5V industrial embedded system with a 3.3V microcontroller, ethernet interface, and USB C programming interface while maintaining full backward compatibility
- Enabled high-speed design reuse by creating Altium Designer schematic and PCB snippets for USB C and Ethernet interfaces
- Created manufacturing releases for high-speed, controlled impedance designs using Altium Designer
- Created Windows Forms application to manage an Altium Designer parts library in a PostgreSQL database

Industrial Internet of Things (IIoT) Intern Summer 2023
Inductotherm Corp. *Rancocas, NJ*

- Removed human error by extending an internal configuration tool to directly generate and export IIoT gateway configuration files
- Suggested and installed a new IIoT gateway operating system to enable remote system deployments, updates, and diagnostics
- Wrote custom software to enable automatic gateway reconfiguration and telemetry with Azure IoT Hub

SKILLS

Electronics Design	High-speed, impedance-controlled routing; 2, 4 & 6-layer boards; hierarchical schematics
Programming	C#, Python, C, C++, Verilog HDL, Java, Bash, MatLab
Server & IoT	Debian and Fedora Linux, Azure IoT Hub, Docker, Podman, Secure Shell (ssh)
CAD Packages	Altium Designer, KiCAD, FreeCAD, OnShape
Development Tools	Vim, Git/GitHub, Azure DevOps, Visual Studio, VSCode, Eclipse
Soft Skills	Technical documentation and writing, professional written and verbal communication

PROJECTS

Rowan Spaceport America Cup Team September 2023 – Present

- Conceived a custom STM32-based flight computer with KiCAD
- Developed a switching power supply board to power flight computers from a 9V battery
- Designed and tested a custom valve controller for a pneumatic parachute deployment system

EDUCATION - ROWAN UNIVERSITY

B.S. in Electrical and Computer Engineering Expected May 2025
Certificate of Undergraduate Study in Cybersecurity Engineering
GPA: 3.76
Martinson Honors College Fall 2021 – Present

AWARDS & SCHOLARSHIPS

Eagle Scout March 2020
Delta Ducon Engineering Scholarship May 2024
Professional Engineering Society of Mercer County — Engineering Student Scholarship 2021