Ben Hyman

Computer Engineer looking for full-time opportunities in PCB and digital hardware design starting August 2024

EDUCATION

ROCHESTER INSTITUTE OF TECHNOLOGY

Bachelors of Science, Computer Engineering with Microelectronics Engineering Minor
GPA: 3.94
Graduation: Expected May 2024

CONTACT

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COURSEWORK

Reconfigurable Computing
Real Time & Embedded Systems
Interface and Digital Electronics
Digital Signal Processing
Digital Systems Design I/II
Computer Architecture
Computer Organization
Applied Programming in C
Assembly & Embedded Programming

SKILLS

PROGRAMMING

VHDL
C / C++
ARM Assembly
Python
LaTeX

SOFTWARE TOOLS

Altium Designer
Orcad
Xilinx Vivado
Altera Quartus II / ModelSim
LTSPICE
Git
Keil
VSCode

HARDWARE

Oscilloscope
Logic Analyzer
Waveform Generator
Multimeter
Power Supply
Electronics Rework Equipment

EXPERIENCE

AVIONICS TEST AND OPERATIONS INTERN

ABL Space Systems
January 2023 - August 2023 | El Segundo, CA

- Designed, built, and utilized a fully functional system that performed acceptance test campaigns on rocket data acquisition systems.
- Developed Python scripts to verify functionality of temperature sensors for the flight computer.
- Assisted in performing hardware-in-the-loop testing.

HARDWARE ENGINEERING CO-OP

D3 Engineering
January 2022 - August 2022 | Rochester, NY

- Performed high speed schematic and layout hardware design for multiple customer projects using Altium and Orcad.
- Participated in design reviews to identify potential problems and improvements in other engineers' designs.
- Assisted in debugging and failure analysis of malfunctioning boards.

SOFTWARE ENGINEERING INTERN

Volvo Group
May 2021 - August 2021 | Hagerstown, MD

- Performed hardware-in-the-loop testing and verification on new release candidates for multiple different engine softwares.
- Designed and created new automated tests and hardware to support more sensors and actuators.
- Discovered a calibration issue in the newest engine software and helped take steps to resolve it.

PROJECTS

NETWORKED MODULAR FLIGHT COMPUTER

August 2022 - Present

- Designed a Linux-based custom PCB responsible for active control of a sounding rocket during flight.
- Assisted with design and participated in design reviews of other flight computer modules.
- Helped define electrical and mechanical standards.

RF CONTROLLED POWER DISTRIBUTION BOARD

October 2021 - June 2022

- Designed an radio-frequency activated custom power distribution board for the payload of RIT Launch's rocket in the 2022 Spaceport America Cup using Altium.
- Successfully performed its function during the competition.

ORGANIZATIONS

RIT LAUNCH INITIATIVE

Avionics Lead | June 2022 - Present | Rochester, NY

- Responsible for overseeing the avionics subteam, which involves all electrical and software projects on the team.
- Led hardware design of the team's first custom flight computer.
- Trained new team members to learn how to use Altium Designer.