Atticus Russell

atticusrussell@gmail.com
(413) 455-9108

github.com/AtticusRussell

Experienced computer engineer highly motivated to contribute in a team development environment. Strong interest and ability in software and firmware development for robotic systems.

Education

Rochester Institute of Technology — Rochester, NY

Expected Aug. '23

Bachelor of Science: Computer Engineering
GPA: 3.31 Dean's List: Spring '22, Spring '20
Relevant Coursework:

- Applied Programming in C (CMPE-380): Became proficient in C programming in the Linux environment
- Intro to Software Engineering (SWEN-261): Became proficient developing Java code in an Agile team environment

Skills

- **Languages:** C, Python, VHDL, Matlab, Arm Assembly, LaTeX, Bash, Java
- **Tools:** GNU/Linux environment, ROS2, Git, ModelSim, Xilinx Vivado, Altium, CAD
- **Technical:** Debugging, troubleshooting, soldering
- **Professional Skills:** Presentations, Scrum Agile framework
- **Extremely proficient in identifying existing open-source code to reduce development time**

Work Experience

Vanteon Corporation: Electrical Engineering Co-op — Pittsford, NY

Aug.—Dec. '21

- Improved RF loopback testing for Vanteon's SDR platform through automation
  - Overhauled Matlab script for test data characterization
  - Wrote C code controlling SDR test menu system, integrated with Matlab script for automatic data collection
  - Designed PCB in Altium to expedite switching RF filters during testing
- Fabricated and assembled display system for customer demonstration

FloDesign Sonics: — Wilbraham, MA

Electronics Team Intern

Jun.—Aug. '21

- Integrated external API into prototype electronic component inventory system

Research and Development Intern

Jun.—Aug. '20

- Developed system to image ultrasonic standing waves using Schlieren imaging with pulsed laser illumination

Product Development Intern

May—Aug. '19

- Used CAD to create parts, assemblies, and drawings for acoustic filtration system
- Created formal work instructions for manufacturing transducers

Research and Development Intern

Jun.—Aug. '18
Jun.—Nov. '17

- Conducted tests of acoustic filtration technology and collected performance data
- Prototyped improvements using CAD and 3D printing
- Regularly presented progress towards project milestones to management and staff

Projects

Autonomous Boat to Seek Radio Beacon — ROS, Python

Aug. '22—Apr. '23

- Designed autonomous boat to seek radio beacon for NASA SAVER competition
- Worked with multidisciplinary team of engineers in Scrum collaboration environment

Small Scale Autonomous Racecar — Embedded C

Aug.—Dec. '22

- Created firmware for autonomous racing vehicle using ARM-based microcontroller
- Wrote state-based control system to navigate an unknown track in a timed race

Pipelined MIPS Processor — VHDL

Jan.—May '22

- Created and tested each stage of a pipelined MIPS processor with VHDL
- Tested overall functionality by calculating a portion of the Fibonacci sequence
- Experimentally found the fastest clock frequency at which the processor could operate

Extracurricular and Personal

Phi Delta Theta New York Eta Chapter — Oct. '21—present
Interests: Cars, audio, rugby, wrestling
U.S. Citizen