Connor F. Henley

https://cfh.sh

OBJECTIVE: Dedicated Computer Engineering graduate looking to start a career in low-level software or high-level hardware (FPGA), where I can apply topics learned in class and experience from co-ops.

EDUCATION:

Rochester Institute of Technology — Rochester, NY
Master of Science in Computer Engineering — Expected May 2021

- Compiler Construction
- Hardware/Software Design for Crypto. Apps.
- Real-time & Embedded Systems
- Reconfigurable Computing

Thesis Title: *Hybrid Scheduler for Performant High-Level Synthesis* (in-progress)
Thesis Advisor: Dr. Sonia López Alarcón

Bachelor of Science in Computer Engineering — Expected May 2021
Minor in Computer Science, Immersion in ASL and Deaf Cultural Studies — GPA: 3.70

- Computer Organization & Architecture
- Digital Systems Design I & II
- Interface & Digital Electronics
- Operating Systems

SKILLS:

Software: FreeRTOS, git, Keil µVision, Linux, STM32CubeIDE, Xilinx SDK & Vivado
Programming Languages: ARM Assembly, C, C++, C#, Java, LaTeX, Matlab, Python 3, VHDL
Hardware: 3D Printer, Multimeter, Oscilloscope, Power Supply, Signal Generator, Soldering

PROJECTS AND LABS:

NXP Cup Car for Interface & Digital Electronics

- Wrote software to autonomously drive a model car around a track as fast as possible
- Interfaced with various sensors and used different control theory methodologies

Power Wheels Universal Control Interface

- Worked in multidisciplinary team of students to build modified Power Wheels vehicle, used to help children with limited mobility learn how to drive wheelchairs
- Developed code-base that processed analog joystick input and generated analog output

RIT FIRST ImagineBots

- Led a project to redesign our table-top robots, which are driven by attendees of ImagineRIT
- Collaborated with other students to design the architecture, write firmware and application software, as well as design some of the circuitry used in the control system

EXPERIENCE:

Senior Project Computer Engineer — 2021 - Present (Incoming)
Lutron Electronics, Boston MA

Computer Engineering Firmware Co-op — Aug 2018 - Dec 2018, May 2019 - Aug 2019
Diebold Nixdorf, North Canton OH

- Maintained and improved a firmware debugging tool which was used by team members daily
- Wrote automated firmware tests in C# and participated in Agile software development

Teaching Assistant and Grader
Rochester Institute of Technology, Rochester NY

- Graded C programs of students in a Linux environment — Aug 2017 - May 2018
- Graded Java projects using IntelliJ and Java 12 — Sept 2019 - Dec 2019
- Graded and helped student write and debug VHDL using Vivado — Aug 2020 - Dec 2020

AWARDS:

A+ and Network Pro Certified
Chairmans's Award and Dean's List Nominee from FRC Team 1699
Dean's List from Kate Gleason College of Engineering, Spring 2017 through Fall 2020

ACTIVITIES AND HOBBIES:

FIRST Robotics — Oct 2009 - Present

- Assisted teams with their robot as a Control System Advisor — Jun 2018 - Present
- Volunteered at FIRST events to keep the event running smoothly — Apr 2014 - Present
- Participated on local FIRST teams, including leadership roles — Oct 2009 - May 2016

RIT FIRST Alumni Association — Sept 2016 - Present

- Mentored various local FIRST robotics teams (FRC Team 3838 and local FLL teams), assisting with programming, electronics, team building, and game analysis
- Led the club as the President, ensuring club projects were successful — May 2019 - Present

3D Printing Enthusiast, Amateur Radio Technician