

MICHAEL REMLEY

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Education

Olin College of Engineering – Needham, MA

May 2022

Candidate for Bachelor of Science in Electrical and Computer Engineering; 3.9 GPA

Recipient of 4-year, 50% tuition scholarship

Relevant Courses: Introduction to Sensors, Instrumentation, and Measurement; Modeling and Simulation in Python; Quantitative Engineering Analysis, Software Design, Analog and Digital Communication.

Northern Utah Academy of Math Engineering and Science – Syracuse, UT

May 2018

Valedictorian, National Merit Scholar, 4.0 Unweighted GPA

Weber State University – Ogden, UT

April 2018

Associate of Art in German, Outstanding Graduate Award, 4.0 GPA

Skills

Specialty

Digital circuit design, PCB assembly, microcontroller firmware (PIC & Arduino)

Software

Autodesk Eagle, MATLAB, Solidworks, Inventor, Office, Mathematica, Fusion 360, National Instruments DIAdem, LabVIEW

Programming

GitHub, Python, C, HTML, CSS, JavaScript, Lua, Mathematica, MATLAB, PIC microcontrollers, Arduino

Hardware

Drill press, miter saw, table saw, band saw, jig saw, table router, hand router, random orbital sander, belt sander, planer, soldering iron, heat gun, heat plate, reflow oven, oscilloscope, multimeter

Experience and Projects

Human Motion Project (Personal Research Project)

May 2016 – Present

Designing and patenting wearable motion tracking system for fitness and medical use. Replaces camera-based motion capture with independent motion sensor array as a more accessible alternative. Personal project developed skills from PCB design and assembly to firmware writing in C and data analysis.

The Floor is Lava (Team Software Project)

March 2019 – May 2019

Pedestrian heatmapping utility to inform organizers how people move around in the space so they may adjust layout.

Math Instructor (Employment)

February 2017 – May 2018

Tutoring K-12 students individually using a specific curriculum at Mathnasium.

Minibeacon Team Lead (Team Research Project)

May 2016 – August 2018

Developed weather balloon telemetry system and maintained small team in its operation. System consists of two GPS trackers communicating over 900 MHz radio with onboard motion sensing and flight data recording. Project team worked within larger telemetry team in research balloon tracking and recovery.

Atmosniffer Development Assistant (Employment)

May 2017 – May 2018

Facilitated firmware team's transition from hobby boards to industry microcontrollers on an all-in-one air measurement device called the Atmosniffer. Also included some circuit assembly and field work related to weather balloon launch and recovery

Hobbies and Interests

Hiking, climbing, backpacking, biking, fitness, photography, computer assembly, handyman tasks, repair, woodworking, German-speaking, HAM radio, game development