MICHAEL REMLEY

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Education

Olin College of Engineering – Needham, MA **May 2022**

Candidate for Bachelor of Science in Electromechanical Engineering; 3.95 GPA

Recipient of 4-year, 50% tuition scholarship; Honor Board Chair FA20-Present. Degree encompasses full electrical and full mechanical engineering depth course requirements.

Relevant Courses: Computer Architecture, Intro. Microelectronic Circuits, 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

Electrical

Analog & digital circuit design, PCB assembly, circuit troubleshooting, microcontroller firmware, prototyping

Software

Autodesk Eagle, MATLAB, Solidworks, Inventor, MS Office, Mathematica, Fusion 360, National Instruments DIAdem, LabVIEW, MySQL/MariaDB, Linux, Roblox

Programming

Git, Python, Flask, C, HTML, CSS, Bootstrap, JavaScript, Lua, Mathematica, MATLAB, PIC microcontrollers, Arduino, OOP, profiling & optimization, full stack web development, SPICE, Verilog

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

Consultant at EnginArt Inc. (Employment/Research) June 2020 – Present

Full stack web development for a project about musical variation. Includes UI/UX design, web security, framework design, database management, website deployment, and user testing. Secondary project in designing a museum exhibit demonstrating chaotic systems via interactive entertainment.

Course Assistant (Employment) *Spring 2020, Present*

Past Course Assistant: *Quantitative Engineering Analysis, Analog and Digital Communication*. Present: *Engineering Systems Analysis*. Tutoring, assignment creation, modification, and assessment.

Planet Simulator (Personal Project) Spring 2020 – Present

A game developed by me and deployed on the Roblox platform. Space-themed planetary physics simulator with 5k monthly visits as of January 2021.

Human Motion Project (Personal Research Project) May 2016 – May 2020

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.

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, NASA, computer assembly, handyman tasks, repair, woodworking, German, HAM radio, game development, Roblox