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Madeleine Weaver

Electrical Engineer

Fluent in English, Proficient in French

Lab Skills

Software
SolidWorks AutoCAD Eagle
PADS Blender Unity
Programming
C/C++ MATLAB Java
Fabrication
Micro-Soldering 3D Printing
Laser Cutting MIG Welding

Awards

IEEE VR Osaka
Best Poster Honorable Mention
Advancing Ethical Decision Making in Virtual Reality
2019

National Science Foundation
S-POWER Scholarship
2016 to Present

ATE Student Award for Excellence
2016

Coursework

Embedded Design
Linear Systems
Networks
Linear Algebra
Differential Equations
Circuit Analysis

Volunteer Experience

Artisans Asylum
Maintenance Volunteer
New England Aquarium
Penguin Colony Volunteer
Walsh Middle School
STEM Tutor and Mentor

Education

Northeastern University, Boston, MA — May 2022
Bachelor of Science in Electrical and Computer Engineering
GPA: 3.1/4.0

Massachusetts Bay Community College, Wellesley, MA — May 2019
Associate of Science in Electrical and Computer Engineering
Assistant to the Chair of the Engineering Department, Engineering Club President, iCREAT Course Teachers Assistant

Research

Silicone Synapse
Northeastern University, Boston, MA — Sept 2019-Present
Research Assistant

- Designed and fabricated electrical and mechanical components for bio-mimetic bat robot
- Programmed and debugged STM-32 processor chips
- Soldered surface mounted components to a flexible PCB under a microscope
- Innovated methods for mounting PCB traces onto carbon fiber chassis and silicone wings

Mixed Reality Lab
University of Southern California, Los Angeles, CA — May-Aug 2018
REU Research Assistant

- Worked on a team of 3 to create an augmented reality environment to measure the effect of virtual immersion on user response when confronted with an ethical dilemma
- Designed virtual objects and built corresponding physical objects with integrated sensors

Professional Experience

Diversified Technologies, Bedford, MA — May-Sept 2019
Electrical Engineering Intern

- Updated 15-year-old piece of equipment used to test control boards for high voltage custom electronics
- Programmed PLDs, replaced archaic PCB hardware, drafted a wiring schematic and 3D modeled the containing box
- Wired and assembled the final product

Dassault Systemes, Waltham, MA — Jan-May 2018
Fab Lab Intern

- Trained to use and maintain digital fabrication equipment in a Fab Foundation designed digital fabrication lab
- Assisted Dassault Systemes employees in using fabrication tools to complete projects