Chloe S. Wilson

Available To Work : June 2023

Boston, MA 02115 🏠
860-574-5576 📞
49wilson.chl@gmail.com ✉
LinkedIn Profile | Portfolio 🌐

WORK EXPERIENCES

Upstart Power, *Product Development Engineering Co-op*   Westborough, MA | July 2022 – Dec 2022
- Designed and manufactured fixtures, prototypes, and linear rail rig for fuel cell testing and assembly
- Detailed SolidWorks drawings, implemented BOM component data into Arena for design deadlines
- Integrated ESD and system control loop algorithms into test setups, improving safety and reliability
- Designed and automated sensor test setups utilizing AC/DC electronics and C++ based software
- Compiled system bulk material cost estimate, UL compliant gasket materials, and technical reports

NxStage Medical, *R&D Systems Engineering Co-op*   North Andover, MA | July 2021 – Dec 2021
- Performed iterative fluid testing on a prototypical dialysis machine and designed testing procedures
- Generated, analyzed, and presented pressure flow data using company software to direct test plans

Northeastern University, *Teacher's Assistant: Cornerstone*   Boston, MA | August 2020 – May 2021
- Graded and tutored 2 courses of 25-30 students in SolidWorks, MATLAB, AutoCAD, and design

Mystified Escape Rooms, *Game Master and Secretary*   Mystic, CT | 2018 – 2020

RELEVANT EXPERIENCES

NURobotics Eboard, *Admin Co-President | Communications Lead | Intro Course Lead*   2020 – 2022
- Managed club via weekly Eboard meetings, external outreach, event planning, and funding (Fall 2022)
- Developed semester curriculum with 4 peers over 5 months and taught 30 students about Arduino hardware and software, CAD, and 3D printing utilizing an Elegoo Robotics kit (2021)

Marsupial Robotics Senior Capstone Project, *Mechanical Engineer*   May 2022 – May 2023
- Collaborated with 5 EECEs and 5 MEs on 2 minibots that dock over variable terrain and exchange their batteries at a mobile hub station, with emphasis on DOE, design, testing, and verification

Acoustically Levitated Droplet Grad Research, *Research Assistant*   Spring 2022
- Utilized MATLAB to analyze evaporation parameters, conducted droplet tests, designed test stand

Combat Robotics, *Fenway Defender Drivetrain Team*   2019, 2023
- Developed invertible drivetrain design in a 3-person team for competitive 30 lb. combat robot (2019)
- Received shop training in manual mill, general machining, hand-tapping, intro to CNC (2023)

Stair-Climbing Walker, *ME Design Course*   Summer 2021
- Worked with team of 5 to design, model, and spec an ergonomic walker to aid mobility on stairs

ASME CSWA SolidWorks Course, *Tutor*   Spring 2021 – Fall 2021
- Taught in weekly 2-hour classes of 40-60 students covering the fundamentals of CAD in SolidWorks

---

EDUCATION

Northeastern University   Boston, MA | Expected May 2023

Bachelor of Science in Mechanical Engineering, Minor in Physics   GPA: 3.96

Relevant Courses:	Thermal Systems, Fluid Dynamics, Material Mechanics, Systems and Analysis
Activities:	NURobotics (Co-President, Intro Course Lead, Communications), ASME, Orchestra

---

SKILLS

Design:	SolidWorks (CSWP)	AutoCAD	Fusion 360	Onshape	GD&T	DFM
Analysis:	Maplesoft	MATLAB	SolidWorks FEA	Microsoft Office	C++	MySQL	Python
Practical:	FDM 3D Printing	AC/DC Electrical	UL Compliance	Technical Writing	Lab Safety	DOE

Interests: Stringed instruments (4+!) | Crocheting | Creative Writing | Hiking | Costume Design