



Nathan Naylor

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347.809.1267

Skills

Software

Excel
Illustrator
InDesign
Mastercam
Photoshop
SolidWorks
Rhino 3D
Unity

Programming

MATLAB
Python
Familiar with C & C#

Fabrication

3D Printing
Circuit Assembly
Clay Modeling
CNC Mill
CNC Router
Foamcore Modeling
Laser Cutting
Molding & Casting
Machine Shop
Metals Shop
Rapid Prototyping
Sewing
Soldering
Textiles
Welding
Wood Shop

Technical

Data modeling
Mechanical systems analysis
Product Photography
Thermal systems analysis

Language

Conversational in Spanish

Summary

Imaginative, versatile, and passionate entry-level professional with multidisciplinary education seeking a career in the intersection between design and engineering.

Education

Carnegie Mellon University

Bachelor of Science in Mechanical Engineering | May 2020

Double Major in Biomedical Engineering

Minor in Physical Computing (iDeATE Program)

Projects

Myceligem

DIY Design Fabrication | Fall 2019

- Constructed a unique, compact, visually appealing, and high capacity jewelry tree using SolidWorks and Rabbit laser cutters.
- Conducted several stages of prototyping and design to generate a functional, novel design that would appeal to many user types.

Powered Contrast Injector for MRI

Biomedical Engineering Design | Fall 2018 - Spring 2019

- Designed a powered contrast injector for applications in MRI in collaboration with a large corporate sponsor.
- Developed and verified functional prototypes following sponsors requirements.

Interactive iPad Stand

Physical Computing | Spring 2019

- Fabricated a mobile iPad holding device according to a single user's wants and needs.
- Utilized electronics and specialized mechanical system to allow user to hold their iPad in multiple settings at many view angles while keeping track of work time.

Enigma Made Clear

Rapid Prototyping Design | Spring 2018

- Conceptualized and assembled a device to visualize the inner workings of the rotor mechanism in the Enigma machine by utilizing an Arduino, programmable lights, custom circuits, and purpose built laser cut components.
- Led a team of three through research, ideation, and the fabrication of several prototypes, reinventing the design in each stage.

Work Experience

Page & Smith Opticians

Assistant Manager | Summers 2018 - 2019

- Managed paperwork, filing, and converted customer files into digital database.
- Fulfilled customer inquiries, complaints, and questions about product specifications.

Leadership & Activities

TNGL Student Organization

Vice President | Sept 2016 - March 2017

- Coordinated members, hosted hackathons, and educated people from a variety of backgrounds about VR, wearable tech, and other emerging technologies.

Fringe Student Organization

Booth Constructor | Annually, 2015 - 2018

- Constructed themed house-like carnival exhibits for the general public to interact with that adhered to appropriate construction and safety codes.

Relevant Coursework

- Biomedical Engineering Design
- Communication Design Fundamentals
- DIY Design Fabrication
- Digital Fabrication
- Human Experience in Design
- Industrial Design Practice
- Product Design Fundamentals
- Rapid Prototyping Design