Kevin O'Neill

https://linkedin.com/in/oneillkevinj|kjoneill1@gmail.com|612.308.8629

EDUCATION

CARNEGIE MELLON UNIVERSITY

MS IN MECHANICAL ENGINEERING Expected Dec. 2020 | Pittsburgh, PA

CARNEGIE MELLON UNIVERSITY

BS IN MECHANICAL ENGINEERING MINOR IN POLITICAL HISTORY Expected Dec. 2019 | Pittsburgh, PA GPA 3.35 / 4

COURSEWORK

Engineering

24-441: Engineering Design 1 24-689: Modern Manufacturing

24-322: Heat Transfer

24-352: Dynamic Systems and Controls

Mathematics

24-311: Numerical Methods 36-220: Engineering Statistics and Quality Control

Computer Science

15-112: Fundamentals of Programming and Computer Science

15-122: Principles of Imperative Computation

SKILLS

MANUFACTURING

Laser Cutting • 3D printing • Lathe • Mill • Drill Press • CNC Mill • Silicone Molding • MIG welding • Soldering

SOFTWARE

SolidWorks • NX • PTC Creo Fusion 360 • Python • C • Matlab • Ansys

PERSONAL WEBSITE



EXPERIENCE

RELATIVITY SPACE | ADDITIVE HARDWARE INTERN

June 2019 - August 2019 | Los Angeles, CA

- Designed, manufactured, and tested equipment for print quality improvement in collaboration with weld engineers, material scientists, and automation engineers.
- Utilizing FEA, designed and manufactured large scale tooling allowing for 8 foot diameter prints given weight and deflection constraints.

RELATIVITY SPACE | Mechanical Engineering Intern

June 2018 - August 2018 | Los Angeles, CA

- Created mounting hardware and installed welding, grinding, and sensor equipment on the printer.
- Designed and sourced large scale tooling allowing for 7 foot diameter prints.

GE ADDITIVE | Engineering Intern

June 2017 - August 2017 | Cincinnati, OH

- Created a document that detailed standard operating procedures and safety hazards for a new metal powder printer. This document is now the template for future systems developed by GE Additive.
- Collaborated with other team members on calibration and build preparation on the proof of concept machine.
- Designed and manufactured a prototype for more automated powder removal from finished metal powder builds.

AGONIC DEVELOPMENT | Co-Founder

January 2017 - Present | Minneapolis, MN

- Co-founded healthcare device company with the goal of improving patient outcomes through remote monitoring post operation.
- Responsibilities include: physical design, prototyping, manufacturing, and communicating with hospitals and physical therapists

TEACHING ASSISTANT | DESIGN 1

August 2018 - Present | Pittsburgh, PA

- Developed new class project and designed and manufactured testing rig
- Held office hours and recitations to assist students with course material, homework, and the class projects.

PROJECTS

GRIPPER | DESIGN 1 PROJECT 2

October 2018 - November 2018

- Collaborating with three team mates, we designed and created a gripper to hold an object during dynamic movement.
- By utilizing carbon fiber and other lightweight materials, we produced a gripper with a mass of 23.4 grams which was best in the class and over 17 grams lighter than the next gripper.

BRACKET | DESIGN 1 PROJECT 1

September 2018 - October 2018

- Designed and manufactured a laser-cut bracket to hold 25 lb of weight.
- Using Solidworks simulations as well as multiple prototypes, my bracket had a mass of 0.72 grams.
- My bracket was the lightest in the class of 120 by almost 10%