Kevin O'Neill

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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

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%