Gordon Robertson

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EDUCATION:

Carnegie Mellon University   **Pittsburgh, PA**
Bachelor of Science in Mechanical Engineering, Expected May 2020
Overall GPA: 3.17   Spring 2019 GPA: 3.73

WORK EXPERIENCE

Structures Engineering Intern at Ekto VR (Start-up)**,** Summer 2019 - Fall 2019   **Pittsburgh, PA**
- Designed and built motorized skates for VR that keep the user-centered in the room no matter where or how fast they walk.
- Designed, analyzed, and tested key components and assemblies of the flagship product.
- Traveled internationally to potential customers to give on-site demos.
- Collaborated upon important milestones with the CEO and Founder.
- Conducted testing using strain gauges and load cells.

Research Intern at Rex Medical, Summer 2018   **Conshohocken, PA**
- Worked with R&D team to build and test minimally invasive atherectomy device that produced better results and required less set-up than competitors.
- Produced and assembled parts in clean room for medical build.
- Built and used benchmark testing apparatus for Rex Medical's atherectomy device.

PROJECTS

Additive Manufacturing Research Fall 2019
- Applied for a research grant from CMU via SURG to study the warping of ABS plastic in FDM system based on the temperature gradient within the part.

Mechanical Engineering Leader (Robotics Club Quadcopter Project) Spring 2017- Winter 2019
- Designed and built a new quadrotor from scratch.
- Taught Solidworks, 3D printing, and laser cutting to new members.
- Worked with the software team to mount sensors and safety components to drone designed for indoor flight.

Gripper Project Fall 2018
- Designed and built a 163g gripper capable of holding a 2lb cylindrical weight swung from a 3ft arm without the weight slipping 0.1in using Solidworks CAD software.
- Chose materials that were easy to manufacture, light, and had sufficient yield strength.
- Performed FEA analysis of the assembly and every constituent part to ensure sufficient strength.

RELEVANT COURSEWORK

AM Lab	Additive Manufacturing and Materials	AM Processing and Product Development
Numerical Methods	Mechanical Systems Experimentation	Special Topics in Thermal Design
Engineering Design I	Entrepreneurship for Engineers	Organizational Behavior

SKILLS

Software: Microsoft Office, MATLAB, Solidworks, Inventor, Creo Pro/E, Meshmixer, Minitab, VBA
3D Printers: FFF/FDM polymer, SLA resin, currently training for EOS, Arcam, and ExOne metal printers.
Machines: EOS, Arcam, ExOneBand-Saw, Laser-cutter, Drill Press, Lathe, Mill, CNC Mill, Instron
Languages: Fluent in Spanish, Working knowledge of French (Lived in Switzerland from age 4-12)
Other Skills: Heat transfer, Leadership, Soldering, Adept with general hardware and software

ACTIVITIES & HONORS

Robotics club, Fall 2017-Present
RPG Association, Fall 2016-Present
RPG Creation Month Competition 2019 - Working to self-publish my winning tabletop game.