

Education

Arizona State University, GPA: 4.0

Expected Graduation May 2019

- Pursuing Bachelor of Science in Engineering, Emphasis in Robotics
- Barrett, the Honors College, Grand Challenge Scholar

Professional Experience

Independent CAD and Prototyping Consultant

September 2015 – Present

Most of my professional experience has been working with inventors to create prototypes and presentation tools for their inventions. This may include helping them finalize their design, creating CAD models for manufacturing, 3D printing prototypes, building websites, and making animations for advertisements and presentations.

Client projects:

- Freshwater Systems – 3D Concept art and animations, Informational videos
- Precise Meds – CAD modeling and 3D printing, Prototype assembly
- Nighthawk Products – CAD modeling and 3D printing
- PodPurse – CAD modeling and 3D printing
- Roller Wringer – CAD modeling, Promotional animation
- Ornamagic – Instructional animation
- Other confidential projects

Technical Skills

Software: Autodesk Inventor, Solidworks, Fusion 360, Onshape, Blender, MS Office Suite, Corel Draw, Inkscape, HTML/CSS, Python, Matlab, Cadence, Multisim, HitFilm

Electronics: Circuit Design, PCB Fabrication, Soldering, Oscilloscope, Arduino, PSoC

Shop Equipment: Laser Cutter, 3D Printer, Mill, CNC, Machine and Wood Shop Tools

Leadership Highlights

- Leading development of the Make-A-Pede, an educational Arduino-based robotics platform
- Led CAD seminar at Scottsdale Community College
- Co-led a semester long Make course for a local homeschool group
- Co-hosted a summer robotics camp for 3 years
- Technical lead for a 2018 Global Leadership Summit site
- Team lead for an eSeed venture developing workshop safety products
- Served as head referee at several VEX Robotics Competition events
- Mentored multiple high school VEX teams

Team Project Highlights

Electronic Game Scorepad: Currently developing an electronic scorepad for board games

Smart Mirror: Developed an internet-connected mirror display

Robotics Exhibit for the AZ Science Center: Designed an exhibit to teach the engineering design process

CNC Router: Constructed a custom fully-enclosed CNC router from scratch.