



# Young Yoo Kim

Mechanical Engineer | Product Design Engineer

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United States Citizen

**Drexel University** Philadelphia, PA

June 2019

Bachelor of Science in Mechanical Engineering

**Harbor Designs and Manufacturing** Baltimore, MD

Sep.2016 – Mar.2017

**Design Engineer  
Co-op**

Design and develop products for consumer electronics, transportation, defense industries and biomedical products using Solidworks. Create renders & prototypes, conduct various design analysis (FEA, mold flow, etc.) and testing of multiple projects at a small, fast-paced design & manufacturing company

- Mechanical design engineer co-op for ISO 9001 and 13485 certified design & engineering company
- Designed an enclosure prototype that houses optics, PCB, and a battery
- Designed weather & tamper resistant enclosure for a detection device to be installed in warehouse facilities of the largest online retailer in the US
- Designed onboard information system mounting solutions for Caltrans Surfliner fleet
- Engineered assembly fixtures and tool attachments to optimize manufacturing processes
- Communicated with clients in regular meetings for project kickoff, design review, and delivery
- Collaborated with overseas manufacturing companies for prototyping and mass production

**Southco, Inc.** Concordville, PA

Sep.2014 – Mar.2015

**Automotive  
Engineer Co-op**

Create and revise product designs, drawings – using NX. Assist senior engineers and project managers in various engineering and managerial tasks at the global headquarter of industry leading access hardware engineering firm

- Researched and developed prototypes of a patented electromechanical marine latch mechanism
- Designed assembly fixtures to improve manufacturing speed and lower physical strain of assemblers
- Presented conceptual design to one of the US's Big Three companies under NDA for a competition
- Collaborated with electrical engineering, NPD, testing, and tooling departments within the company
- Communicated with international Southco manufacturing facilities in China and Mexico regularly

**Projects** personal projects & group projects

- Drexel Senior Design – Micro Air Vehicle w/ pick up and place capability. Chassis design/prototyping
- 4R Robotic Arm – Pick and place capable 4R dual linkage robot arm powered by Arduino
- Seamless Laptop – Low power laptop enclosure design. IoT prototyping platform with modularity
- Furniture Design – Stool, shelf, table, and light fixture designs
- Two Wing Ornithopter – Insect haltere function demo mechanism design/prototyping
- System Builder – Over 50 custom office, medical, CAD personal computer builds
- Web Design – Portfolio website and Vision Care USA (visioncareusa.org) website design

**Technical Skills**

- Engineering Tools – Solidworks, NX, Creo, LabVIEW, MATLAB, Autodesk AutoCAD/Inventor/Moldflow
- Design Capability – FEA, DFM, CAD/CAM, Plastic injection molding, 3D Printing, Laser cutting, Sheet metal, CNC Machining/Lathe
- Operating Systems – Windows 7, Windows 10, macOS, iOS, Android
- Utilities – Microsoft Office Suite, G Suite, Adobe Creative Suite (Ps, Lr, Ai, Id), CURA
- Web Design – HTML, CSS, JavaScript, Brackets, GitKraken, Github, Google Analytics

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