Shawn Sobel

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EDUCATION

Northwestern University, Evanston IL
Bachelor of Science in Mechanical Engineering
Expected Graduation: June 2017
GPA: 3.44/4.00
Dean's List: Spring 2014, Winter 2016, Spring 2016

WORK EXPERIENCE

GE Aviation: Marine and Industrial Engines Intern, Evandale, OH   June 2015 - August 2015
- Developed marine engine build processes that reduced assembly time by 3 hours per engine.
- Improved productivity and reduced wait time for parts by identifying supply chain blockages and outdated assembly procedures.
- Automated daily productivity reports in VBA which enabled greater worker accountability.
- Assisted quality engineers in tracking and standardizing assembly tooling across 4 divisions.
- Streamlined engine delivery and decreased tooling needs by 50% with redesign of shop layout.

RESEARCH EXPERIENCE

Wagner Research Group: Researcher, Evanston IL   June 2016 - September 2016
- Simulated blood flow through multiple mitral valve configurations in ANSYS Fluent.
- Modeled complex anatomical surfaces in MATLAB, NX, and SOLIDWORKS.

NU Mechatronics Lab: Robotics Intern, Evanston IL   June 2016- September 2016
- Prototyped, coded, and tested autonomous hover robots to be used in robotics competitions.
- Designed a hover course in NX for robotics competition.

LEADERSHIP EXPERIENCE

NU Space Technology and Rocketry Society: President, Evanston, IL   April 2016 – Present
- Led executive board and 50+ club members in four independent aerospace competitions.
- Oversaw weekly STEM workshops at local elementary and middle schools.
- Fundraised $20k budget through corporate sponsorship and academic grants.

NU Space Technology and Rocketry Society: Lead Engineer, Evanston, IL   April 2014 – April 2016
- Modeled 20 component flight responsive steel air brakes in NX
- Directed manufacturing of airbrakes, data logging, and optical systems.
- Mentored 14 students leading to their level one high-power rocketry certification.
- Developed and built all structural components of launch vehicles for 2015 NASA Student Launch competition utilizing hand calculations, rocketry software, and MATLAB modeling.
- Prepared 25+ page reports for preliminary design and flight readiness reviews for NASA Student Launch.

Challah for Hunger: Baking Director, Evanston IL   September 2013 - Present
- Coordinated 20 volunteers twice weekly for the bulk production of bread sold for charity.
- Managed kitchen, inventory, safety, and quality control during weekly fundraising events.

SKILLS

Programming: MATLAB, VBA, and Python
Modeling: NX, SOLIDWORKS, and ANSYS Fluent
Engineering: GD&T, Arduino, heat transfer, rapid prototyping, and manufacturing