

# MANNY FACTURE

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## EDUCATION

**Carnegie Mellon University** Pittsburgh, PA

Bachelor of Science in Mechanical Engineering, May 2016

Double Major in Biomedical Engineering

Overall GPA: 3.0/4.0

**University of Madrid**

Madrid, Spain

Semester Abroad, Spring 2015

## RELEVANT EXPERIENCE

**Procter & Gamble Manufacturing Company** Lima, OH

Engineering Intern, Summer 2015

- Conducted line trials to determine plant capability and made recommendations for noise mitigation
- Implemented a daily management system for managing scrap in order to reduce weekly accumulation
- Commended by supervisor for completing projects 3 weeks ahead of schedule

## PROJECTS

**Suitcase with Vacuum Pump, Design II**, Spring 2016

- Developed and built a suitcase with a vacuum pump that removed excess air to increase packing capacity by up to 50%, allowing travelers to bring more personal items per trip

**Temperature Controlled Shipping Unit**, Spring 2015

- Designed and analyzed with FEA a shipping container that can bring a biospecimen container to 4°C within 10 minutes
- Devised the system such that it is functional in 60°C ambient temperature

**Swinging Gripper, Design I**, Fall 2014

- Led a team of 5 people to create a robotic gripper that used a small motor torque to hold onto a billiards ball through one full swinging motion
- Constructed a 3D representation of the gripper in SolidWorks and ran stress simulation on the model

**Astronaut's Coat Rack, Design I**, Fall 2014

- Designed a coat rack with mass and support constraints to sustain a load in space
- Succeeded in creating a design that could carry three times the required load with an acrylic structure that weighs less than 10 grams.

**Head Mechanic and Buggy Chairperson, Pi Kappa Alpha Fraternity**, 2014 – present

- Customized and built a gravity racer, out of composite materials, for annual University racing competition
- Created and manufactured all steering, braking and mounting components
- Decreased race time by more than 5 seconds with design of new steering

## RELEVANT COURSES

Manufacturing Sciences

Mechanical Systems Experimentation

Microfluidics

Computer-Aided Design

Engineering Statistics and Quality Control

Engineering Graphics

Computer-Aided Engineering

Cellular Biomechanics

Fuel Cell Systems

## LEADERSHIP

**Vice-President, Tau Beta Pi (National Engineering Honor Society)**, Spring 2014 – present

- Plan outreach events in the Pittsburgh area to bring awareness to the importance of STEM
- Motivate the 60 members to attend meetings and organize events

## ADDITIONAL EXPERIENCE

**Carnegie Mellon University** Pittsburgh, PA

Desk Attendant, Fall 2013 – Spring 2014

- Checked students' identification to ensure the safety of the residence hall students

## SKILLS

**Software:** Microsoft Office, MATLAB, Solidworks, Creo Pro/E, Autodesk Inventor, ANSYS, ADAMS

**Machines:** Mill, Lathes, Drill Press, Band Saw

**Spoken Languages:** Fluent in French; Conversant in Spanish

## ACTIVITIES & HONORS

Pi Kappa Alpha Fraternity, 2013 – present

Men's Track and Field Team, Carnegie Mellon, 2012 – present

American Society of Mechanical Engineers (ASME), 2012 – present

College of Engineering Dean's List (GPA 3.75 and above), Fall 2013, Spring 2014