

Eloisa Baez Jones

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Education

University of Pennsylvania – School of Engineering and Applied Science **August 2013 – May 2017**

Candidate for B.S.E in Mechanical Engineering and Applied Mechanics - GPA: 3.37

Coursework in *Mechanical Design and Manufacturing*, Linear Algebra, *Thermodynamics*, Scientific Computing, *Statics and Strength of Materials*, *Dynamics*, C++, Differential Equations, *Fluids*, *Solids*, *Design of Mechatronic Systems*

Mechanical Design and Fabrication Experience

Variable Pitch Quadcopter

March 2015

Design and fabrication of variable pitch quadcopter
Single motor with reversible thrust for upside-down flight

Penn Electric Racing

January 2015 - Present

Formula SAE Electric Racing team
Aid with machining of components and assembly for competition car

UPenn Battlebots

January 2015 - Present

Machining of 3 pound titanium and aluminum battlebot using CNC and manual mills

Gamma -Type Stirling Engine

September 2014 – December 2014

Designed and machined stirling engine, Components made of aluminum, steel, and brass. Ran at 1100 rpm.

World Championship FIRST Robotics Team

2011 - 2013

Designed and built two 120 pound robots for FIRST (For Inspiration and Recognition of Science and Technology)
Competed at FIRST World Championship after 2012 Palmetto Regional win

Professional Experience

BossaNova Robotics Mechanical Engineering Intern

May 2015 – August 2015

Design, prototype, integrate, and test robotic systems and mechanisms

Teaching Assistant: Introduction to Scientific Computing

August 2014 – present

Course serves as an introduction to MATLAB for engineering students
Create exams and quizzes, Hold office hours and recitation, and grade homework and exams.

ModLab Research Assistant

February 2014 – August 2014

Reverse engineered a robotic gripper using Solidworks and 3D printing at a GRASP laboratory;
Awarded Research Experience for Undergraduates Grant from NSF

Skills

Fabrication: CNC milling, manual milling, manual turning, laser cutting, 3D printing

Software: Solidworks, ProtoTRAK, Microsoft Office Suite including Excel, Adobe Photoshop, Adobe Illustrator

Languages: MATLAB, Java, C, C++, HTML