|  |  |  |
| --- | --- | --- |
|  |  | EducationUniversity 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  Candidate for M.S.E. in Robotics  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*, *Product Design* |
|  |  |  |
|  |  | Mechanical Design and Fabrication ExperiencePenn Electric Racing – Formula SAE January 2015 - Present Design of pedal box  Aid with machining of components and assembly for competition car Gamma -Type Stirling Engine September 2014 – December 2014 Designed and machined stirling engine, Components made of aluminum, steel, and brass. Ran at 1100 rpm. Vertical Axis Wind Turbine October 2015 Design, analysis, and fabrication of vertical axis wind turbine  Tested small scale Darrieus, Savonius, and hybrid type; built full scale Savonius type 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 **Bossa Nova Robotics Mechanical Engineering Intern May 2015 – August 2015**  Design and fabrication of sensor mounts for production robots  Aided with assembly of three production robots  **Machine Shop Assistant August 2015 – Present**  Help students learning to operate manual mills, manual lathes, and hybrid CNC mills 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, 3D printing, laser cutting, soldering  **Software:** Solidworks, ProtoTRAK, Microsoft Office Suite including Excel, Adobe Photoshop, Adobe Illustrator  **Languages:** MATLAB, Java, C, C++, HTML |