# Sidney M Velado

Mechanical Engineering/Robotics Major

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## Education

2014–2015 Cheshire Academy, High School Diploma.

GPA: 3.72/4.0, Honors, Effort Honors, AP Scholar Award

2015–Today **Carnegie Mellon University**, *B.S Mechanical Engineering and B.S in Robotics*, Semester GPA: 3.0, Third Year Undergraduate.

## Experience

2015 **Unique Artifact Recovery Project**, *Carnegie Mellon University Design Project*, Pittsburgh, PA.

Worked in a 5 person team to design a mechanical arm gripper to lift a unique object and manipulate it under constraints. Designed parts including gripper contact points and gripper fingers in Solid Works. Machined different components of overall team design with 3D printers, laser cutters, and standard machine shop.

- 2017 **G.O.A.T Mechanical Robot**, *Carnegie Mellon University Design Project*.

  Created a three bar linkage mechanical robot modeled after a goat. Used a combination of Solid Works CAD modeling and rapid manufacturing techniques to test prototype and manufacture final design.
- 2018 **Drawing World**, Carnegie Mellon University Intro to Programming Final Project.

  Created a basic graphics/painting utility application with Python. Application boasted voice control as well as face tracking with a basic machine learning algorithm to fit people's faces with images of celebrities.
- 2018 **Urban Search and Rescue Robot**, *Carnegie Mellon University Contest*.

  Built a robot with Lego Mindstorms kit as well as custom acrylic and 3D printed components in order to participate in an competition of creating an Urban Search and Rescue robot. Built the main robot design as well as programmed the controls in a C framework

### Skills

Programming C, Python, HTML, CSS, Arduino Programming and MATLAB

Languages English/Spanish/Elementary French

CAD **Solidworks** FEA Simulations, Part and Assembly Planning

### Extracurriculars

Athletics CMU Lacrosse Vice President 2016, CMU Men's Club Volleyball

Student Orgs Society of Hispanic Professional Engineers, CMU Formula SAE Racing

Leadership Phi Delta Theta Social Chair, Latin Student Association Internal Outreach Chair