

Sidney M. Velado

Current: 5114 Beeler Street, Pittsburgh, PA 15217

Cell: 412 298 7620 **Email:** svelado@andrew.cmu.edu

Permanent: 5032 Forbes Avenue, SMC 6598, Pittsburgh PA 15289

LinkedIn: www.linkedin.com/in/smvelado

EDUCATION

Carnegie Mellon University, Pittsburgh PA

Bachelor of Science in Mechanical Engineering & Bachelor of Science in Robotics

EXPERIENCE

Robotics Institute Biorobotics Laboratory, Carnegie Mellon University, Pittsburgh PA, Summer 2018

Robotics Engineer

- Designed different mechanical components in CAD for a wide array of projects
- Machined, 3D printed, and laser cut designed components and integrated them into robotic systems
- Programmed in a Linux Environment (Ubuntu)
- Coded in a C++/C and Python and implemented them in a ROS framework

PROJECTS

ODrive ROS Package, ODrive Robotics, Summer 2018 - Present

- Contributed to the ODrive Robotics Documentation
- Developed ROS package for the ODrive motor controller
- Collaborated with other programmers to test and deploy ODrive ROS package

Urban Search and Rescue Robot, Carnegie Mellon Robotics Competition, March 2018

- Built a robot with the Lego Mindstorms kit, custom acrylic, and 3D printed components
- Programmed controls and teleoperation in Robot C framework

G.O.A.T Mechanical Robot, Fall 2017

- Created a three-bar linkage mechanical robot modeled after a goat
- Used a combination of CAD modeling and rapid manufacturing techniques to test prototypes and final design

RELEVANT COURSES

Robot Kinematics and Dynamics

Mobile Robot Development

Principles of Imperative Computation

Computer Vision (Spring 2019)

Dynamic Systems

Machine Learning (Spring 2019)

LEADERSHIP AND EXTRACURRICULARS

Society of Hispanic Professional Engineers, Fall 2015

- General Body Member

Internal Outreach Chair, Spanish and Latin Student Association

- Recruited incoming students to the organization and improved membership by 30%
- Ran multiple events to attract students to the organization
- Organized forums for students to be able discuss the LatinX experience at Carnegie Mellon

Phi Delta Theta Social Chair

- Planned a formal dinner for 150 people with at a popular Pittsburgh Venue
- Led a committee to organize and plan all social functions
- Managed a \$14,000 budget

CMU Club Lacrosse Vice President

- Set up transportation to games
- Ran the club's finances in cooperation with the university

SKILLS

Programming: ROS, C++, MATLAB, Python, C, Development in Linux, Git

Engineering: Machine Shop, SolidWorks, CNC Machining, 3D Printing, FEA Simulation

Spoken Languages: Fluent in Spanish; Conversant in French