

Mateo Guaman Castro

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mateoguaman.github.io

Education

Tufts University, Medford, MA
Bachelor of Science in Electrical Engineering, expected May 2020
GPA: 3.73, Dean's List 2 semesters
Unidad Educativa Julio Verne, Quito, Ecuador
Class of 2016
Valedictorian

Relevant Courses

General Physics 1, Calculus 1 and 2, Introduction to Computer Science (C++), Applications in Engineering: Simple Robotics, Introduction to Computing in Engineering (MATLAB)

Skills

Programming Languages: C++, Python, MATLAB, HTML, LabVIEW
Products and packages: Raspberry Pi, Arduino, ROS, LEGO MINDSTORMS
Software: Adobe Illustrator, Lightroom, Premiere Pro, InDesign, Microsoft Office products
Language: Spanish (native)

Experience

CRISP Lab, Tufts University, Research Assistant, 2017

- Designed and built a land robot from scratch to be used on research in obstacle avoidance with computer vision, control systems of the robot and real time communication with a drone.
- Controlled from a Raspberry Pi that communicates through ROS to an Arduino that controls the sensors and movement of the robot

Center for Engineering Education and Outreach, Tufts University, Summer Internship, 2017

- Built an Arduino-based IoT sign for Prof. Ethan Danahy's Lab as part of a local network of IoT devices that can be used to develop and showcase the IoT capabilities of the LEGO MINDSTORMS EV3.
- Developed examples of a Raspberry Pi controlling the color of the above sign and Philips Hue lightbulbs over the internet.
- Mentored a workshop for 38 Japanese High School students on client based product development.

Project

Programming project for high school entrepreneurship fair, 2015

- Developed a voting program in Python for my school's entrepreneurship fair to make the process of voting for the best project more reliable and efficient

Community Service

Fundación Brethren y Unida, Pichincha, 2013-2015

- Reforested, helped build canals, fences, and orchards in the small town of Picalqui to foster community development and organic production of goods.
- Reforested and made compost beds for burned-down section of the biggest urban park in Quito, Parque Metropolitano.