Manuel Meraz

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EDUCATION

Associate of Science, Computer Science
Associate of Science, Mathematics
Southwestern College, Chula Vista, CA, May 2016
GPA: 3.38/4.0

Relevant Coursework
Data Structures and Algorithms, Computer Org and Architecture,
Calculus 1-3, Physics 1-2, Intro to Linear Algebra, Discrete Mathematics,
Intro to Differential Equations

EXPERIENCE

Software Engineer Intern June 2016 - July 2016
University of New Mexico,

- Development of integrated robotic platforms that improve resource retrieval rates, compared to the same number of robots operating without cooperation, and orders of magnitude faster than solitary robots
- Developed the implementation of an autonomous gripper for rover resource gathering
- Developed a tracking system for resources detected by rovers
- Leadership position guiding less experienced interns with ROS, C++, and the Swarmathon code base

Python Grader June 2015 - June 2016
Art of Problem Solving,

- Helped hundreds of students by offering constructive feedback, which includes checking for docstrings, readability (PEP 8), OOP, algorithms, and basic design
- Improved written communication by tailoring feedback based on student understanding of assignment
- Developed clear communication required to meet expectations for class required by professor

SKILLS

Proficient: Python, Java, C++
Prior Experience: C, MIPS
Tools: Eclipse, Netbeans, PyCharm, Linux/Unix, Git, Vim, Robot Operating System (ROS)

Fluency in Spanish

PROJECTS

github.com/ManuelMeraz

NASA Swarmathon Competition 2017, C++ Present

- Currently recruiting students
- Developing workshops to teach students ROS, Unix, C++ and git
- Building rovers to be used for competition

NASA Swarmathon Competition 2016, C++ January - April 2016

- Lead a team of students during the competition
- Implemented efficient collecting algorithms using Gazebo simulations with ROS and C++
- Public speaking skills developed during bi-weekly reports with mentor