# Elmer.X.Rodriguez

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#### PROGRAMMING SKILLS

C • C++ • Java • Python • PHP • Python • HTML5 with CSS • C#

# COMPUTER SCIENCE EDUCATION, AWARDS AND INVOLVEMENT

UNIVERSITY OF ROCHESTER
Bachelor of Arts in Computer Science

ROCHESTER, NY anticipated December 2016

Summer 2016

### PROGRAMMING PROJECTS

#### LASER HARP

Programmer of the Laser Harp Team

Collaborated with a team in order to develop a new software for the University of Rochester's Laser Harp in order to improve the proximity of its sound to that one of a harp. With the team, implemented several sound wave testing and comparison tests in order to assimilate the sound as much as possible. Currently, the team is working in creating a more portable platform to make it practical for use in music performances.

SQUIDDLEMADUNK: Modular Robot Centipede (with Transport Applications)

Programmer, Designer, Engineer, Tester, Project Manager

Under the guidance of Professor Nelson, the team designed and implemented a modular legged robot transport device inspired by natural centipedes. The robot consists of a head/brain unit containing environmental sensors and guidance and control computation. This is followed by an arbitrary number of leg segment modules, each containing its own power and local control computation, and needing connection only to the unit in front of it. The whole functions somewhat like a legged train.

### PROGRAMMING EXPERIENCE

IDTECH CAMPS NEW YORK, NY

Director, Instructor, Internet Technology

As the director of the summer camp I was responsible to ensure that all fifty-six student had a great experience learning while learning difference technologies. Further, I thought one-on-one basis more advanced materials to students that were ahead of their class. In one instance I thought a eleven year old student the basics of artificial intellegence using Python. Furthermore, I was responsible for solving any technical issue that came up in the computers labs throughout the lenght of the summer program. I managed a team of ten staff instructors.

UR ROBOTICS CLUB ROCHESTER, NY

Programmer August 2014

Participated in several project in where include but not limited to the creation of all terrain robot vehicle, water resistant fish type of robot, between others. Learned how to use micro-control hardware such as Arduino boards, etc. Assisted in the improvement of a virtual reality game created by the club.

## RELEVANT COURSEWORK

Web Design and Development • Advanced Web Design and Development • Computation and Formal Systems • Mobile App Development (Android) • Mobile App Development (iOS) • Robot Construction • Video Game Studies • Social Implications of Computer Science • The Science of Data Structure