ALEX RENDA

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EDUCATION

Cornell University, College of Engineering, Ithaca, NY
Bachelor of Science in Computer Science, expected May 2018.

CS Coursework:

- CS 2112 : Object-Oriented Design and Data Structures – Honors. Fall, 2014
- CS 3410: Computer System Organization and Programming. Spring, 2015
- CS 2800: Discrete Structures. Spring, 2015

Saratoga High School, Saratoga, CA
Graduated as Salutatorian, June 2014.

SKILLS

Proficient in Java and Python. Familiar with C/C++, Linux, machine vision, HTTP/HTML/JavaScript.

WORK EXPERIENCE

Tesla Motors, Palo Alto, CA — June 2014 - August 2014

System Validation Intern

- wrote a user interface for test case management using Python/HTML/JavaScript/CSS. The tool guided users through a series of prompts and dynamically created complex queries based on user responses
- designed and implemented a Python interface to automatically upload test case results to a server
- developed an Android app to monitor results of automated regression tests

PROGRAMMING EXPERIENCE

CUAUV — 2014 - Present

As a member of the software team of Cornell University's autonomous underwater vehicle project team, I:

- work collaboratively as a member of a large (~40 person) team
- use machine vision to detect and classify different targets underwater
- develop autonomous, priority-based routing and task execution systems

My current project is building a Python-based framework for machine vision that will let our submarine process and interpret data from multiple cameras.

Android Development — 2012 - Present

Developed and released several Android apps, including:

- an app that parses and synthesizes XML data about a popular video game and displays it in a more understandable graphical format
- a weight and balance calculator for small planes, which helps pilots calculate if their plane is safe to fly with its current weight distribution
- an Android tower defense game

FIRST Robotics — 2010 - 2014

Vice President and software lead of my high school's robotics team. Worked on projects such as:

- developed manual and autonomous control systems for FRC robots, utilizing PID control loops, machine vision, network communication, etc.
- wrote a Java graphical emulator for that let our team test code without a physical robot
- created a scripting language to let us rapidly develop and test autonomous modes
- held a weekly training session to teach club members to program FRC robots