Will Xu

3934 Camino Calma, San Diego, CA || (510) 269-0349 || wlxu@ucsd.edu || https://github.com/willxu1234

Education:

University of California, San Diego, La Jolla, CA — *B.S. Computer Engineering*
Upper-Division Major GPA: 4.0
September 2016 - June 2020

Experience:

Nuro, Software Engineering Intern — *Mountain View, CA*
June 2018 - September 2018

- Discussed progress and goals in a weekly meeting with the CEO and a small, but vital team
- Developed a module in a Publish-Subscribe framework that ensures the quality of sensor data
- Built dynamic OpenGL renderables, a packet multiplexer, and C++ plugins
- Refactored pre-existing code by exposing functionality, enabling its use in other classes

Velodyne LiDAR, Engineering Intern — *San Jose, CA*
June 2016 - September 2016, June 2017 - September 2017

- Coded several Python and Matlab scripts to ensure proper functionality of LiDAR sensors
- Upgraded the sensor's web interface with a new 'Manual Mode' feature
- Fabricated and coded an Arduino-based tachometer to precisely measure the RPM of a sensor
- Updated a test script to control a ThorLabs motor, building an interface for the script and DLL

Projects:

ECE 148 - Intro to Self-Driving Cars
April 2018 - June 2018

- Constructed and trained a self-driving RC car running an open-source library on a Raspberry Pi
- Performed off-board model training on UCSD's supercomputer center's GPU cluster
- Injected code into the donkey framework interfacing an open-source, voice-recognition API (SoPaRe) and onboard Raspberry Pi to allow for voice control of the vehicle

HQ Trivia Video Analysis Script
April 2018 - May 2018

- Programmed a Jupyter notebook to use screen-capture OCR to detect and categorize text from a pre-recorded HQ trivia video
- Employed BeautifulSoup to scrape Google search metadata and predict the answer in the same script

IEEE Quarterly Project - Web-based Motion Sensor
September 2016 - December 2016

- Designed, programmed, and built a device to fit a data-driven web design theme as group leader
- Developed a website running on the Raspberry Pi using the MEAN stack

Skills:

- C++, Python, Java, C, HTML, CSS, MATLAB
- Arduino, Raspberry Pi, Solidworks, Autodesk
- Git, Bazel, Google Protobuf, Angular, Ruby on Rails, Django
- English and Chinese (Mandarin and Shanghainese)