# WENLONG XIONG

COMPUTER SCIENCE AND ENGINEERING at the UNIVERSITY OF CALIFORNIA, LOS ANGELES GPA: 3.75 | CLASS OF 2018

## WORK & EXPERIENCE ——

VCLA Center at UCLA, Los Angeles, CA

July 2015 - Sept 2015

Student Researcher, Programmer

- + Created simulation program that performs real-time error checking against robot arm position
- + Designed python program to generate 3D Maya models from CSV output
- + ICRA 2016 Robot Learning Research Paper contributor

Plethora, San Francisco, CA

June 2014 - Sept 2014

Factory Automation, Programming Intern

- + Designed, assembled, and tested automated CNC part-loading structures
- + Programmed Beaglebone/Arduino-controlled robotic systems
- + Tested and optimized in-house CNC-based manufacturing processes
- + Created CAM programs and operated 3-Axis, 5-Axis CNC Mills

Avetra Biosciences, Menlo Park, CA

June 2013 - Aug 2013

Product Development Intern, Independent Researcher

- + Analyzed miRNA and protein content of human exosomes in order to develop human blood/urine exosome isolation kits
- + Performed wet lab procedures, including PCR, gel electrophoresis

# **ACTIVITIES & PROJECTS —**

UCLA IEEE Student Branch, Los Angeles, CA

July 2015 - Current

Treasurer, Bruin Startup Fair Organizer, Corporate Funding Team

- + Manage organization finances and approve over \$25k of purchases
- + Communicate with over 60 corporations and negotiate sponsorship deals
- + Help organize startup-focused career fair with over 35 startups

LeapCAD @ LA Hacks, Los Angeles, CA

Apr 2015 - May 2015

Python and Mel Script Programmer

- + Wrote program that manipulated 3D models using LeapMotion Controller
- + Connected motion capture output with Maya API using Python, MEL, C++

Micromouse Team, Los Angeles, CA

Oct 2015 - May 2015

C++ Programmer

- + Built a rat sized robot that used a modified version of the FloodFill algorithm to navigate a 16x16 maze
- + Interpreted IR sensor, gyroscope sensor output using a Teensy

FIRST FRC Gunn Robotics Team #192, Palo Alto, CA

Aug 2011 - May 2014

Vice Captain, Financial Lead, Mechanical Designer

- + Managed team and facilitated overall design and testing of robot
- + Manufactured components using manual, CNC mill and lathes
- + Communicated with over 15 corporate sponsors and applied for over \$5k of federal grants

#### SKILLS —

#### PROGRAMMING & PROTOTYPING

- **+** C/C++
- + Arduino
- + Python
- + Teensy
- + Java
- + Beaglebone
- + BASH Shell
- + Raspberry Pi

## **MANUFACTURE & MODELING**

- + Solidworks
- + CNC Mill
- + Inventor
- + Lathe
- + Maya
- + TIG Welding
- + HSMWorks
- + 3D Printing

### ADDITIONAL LANGUAGES

- + English
- + Spanish
- + Mandarin

## **EDUCATION** —

- + Algorithm Design & Complexity
- + Operating Systems Principles
- + Computer Networking
- + Database Systems
- + Intro to Computer Architecture
- + Data Structures & OOP
- + Logic Design of Digital Systems
- + Linear Algebra & Applications
- + Differential Equations
- + Intro to Discrete Mathematics
- + Intro to Probability Theory

# CONTACT & INFO -



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