WENLONG XIONG

COMPUTER SCIENCE AND ENGINEERING *at the* UNIVERSITY OF CALIFORNIA, LOS ANGELES

GPA: 3.79 | 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

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 Team, 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++
+ Python
+ Java
+ BASH Shell
+ Arduino
+ Teensy
+ Beaglebone
+ Raspberry Pi

MANUFACTURE & MODELING

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

ADDITIONAL LANGUAGES

+ English
+ Spanish
+ Mandarin

EDUCATION

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

CONTACT & INFO

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