

YIDING FANG COMPUTER SCIENCE, UNIVERSITY OF CALIFORNIA SAN DIEGO class of 2018

I am a third year undergraduate in the Jacobs School of Engineering at the University of California, San Diego. My interests lie in datasciences and bioinformatics. I have a strong interest in web and mobile development and love to apply myself to research. A long time design student, I express myself in through both traditional art and graphic design.

WORK EXPERIENCE & INTERNSHIPS

Center for Computational Biology & Bioinformatics, La Jolla, CA

Bioinformatics Intern, June 2016 - Present

- Designed pipeline for shotgun metagenomics analysis
- Used Jupyter and Python to scrape and summarize program outputs
- Developed software for data visualization using matplotlib

Allergan - Legacy Oculve, South San Francisco, CA

R&D Intern, June 2015 - January 2016

- Designed, debugged, and assembled PCBs
- Programmed PIC family microcontrollers for automation
- Tested, verified, and validated device software and external output

Scripps Research Institute: Marcondes Lab, La Jolla, CA

Biosystems Intern, January 2016 - March 2016

- Performed network analysis using jActiveModules and Cytoscape
- Utilized principles of protein pathway analysis for experiment design
- International Society for NeuroVirology October 2016

PROJECTS

Kale Studios: Turnip, La Jolla, CA

UI Specialist, March 2016 - June 2016

- Front end Android development for spontaneous event planner
- Designed and implemented SQLite local database
- Implemented presentation and business level logic on front end
- Integrated Google Maps and Places API for the in app map views
- Available on the Google Play Store or at turnip.tk

San Diego Smart City Hackathon: OneDrop, La Jolla, CA

Programmer, May 2016

- Front end Android development for water usage awareness app
- Utilized Teradata technologies to implement database calls

Engineering World Health, La Jolla, CA

Programmer Genetic Circuits, January 2016-present

- Developed Android app for quantification of paper Genetic Circuits
- Used OpenCV for edge detection and color detection

Programmer RNA Extraction, September 2014 - September 2015

- RNA transcription device based on Roche protocol
- Developed Arduino code for PID control of motors and vacuum pump

Workshop Chair, September 2015 - present

- Software engineer for low-cost pulse oximeter
- Used Matplotlib and Python for graphical visualization of pulse
- Software engineering for low-cost breathalyzer
- Developed Arduino code for analog signal acquisition and denoising

Hack LA: LEAP CAD, Los Angeles, CA

Programmer, April 2015

- Interfaced LEAP motion and Thalmic MYO with Autodesk Maya
- Implemented Python logic for free hand manipulation of 3D models

EDUCATION & COURSES

CSE100: Advanced Data Structures

CSE101: Design and Analysis of Algorithms

CSE105: Theory of Computability

CSE110: Software Engineering

CSE140: Components and Design Techniques for Digital Systems

CSE150: Introduction to Artificial Intelligence: Search and Reasoning

PROGRAMMING

Java, C, C++

HTML, XML, Javascript

Python, BASH

HARDWARE

SolidWorks, Altium Designer

Labview, MPLabX

ISE Design Suite, Verilog

PROTOTYPING

Arduino, Raspberry Pi

PIC Microcontrollers

DESIGN

Adobe Photoshop, Indesign

Latex

LANGUAGES

Native English

Fluent Chinese

College Spanish

HONORS

San Diego Smart City

Finalist, Best in IOT



4238 RICKEY'S WAY UNIT I

PALO ALTO, CA 94306

(650) 888-7857

yif017@eng.ucsd.edu

edenfang.com