Eric Syu
698 Page Street, San Francisco, CA, 94117
858 888 5259 | ejsyu@ucsd.edu

Education

B.S, Mathematics-Computer Science
UC San Diego
Relevant Coursework: Introduction to Machine Learning (Cogs 118A), Fundamentals of Operating Systems (CS 120), Theory of Computation (CS 105), Design and Analysis of Algorithms and Systems (CS 101), Components of Design of Digital Systems (CS 140), Advanced Data Structures (CS 100)

Work Experience

Hive.ai Software Engineer, Growth — 2018 - Present
- Designed and built distributed ETL pipeline using Node.js and RabbitMQ to deliver data to both internal and external customers, applying pre and post processing heuristics on millions of bounding boxes weekly
- Built and deployed robust scraping systems for millions of web images, pdfs, audio, and video
- Performed data analysis by writing scripts for generating confusion matrices and precision-recall curves

Cubic Transportation Systems Software Engineering Intern — Summer 2017
- Designed and developed a Slimgate prototype, a animal footprint gate for public subway ticketing
- Built multithreaded middleware program in Java and Python for data collection and state-machine based gate functionality, created web dashboard with flask/socket.io and javascript
- Optimized both hardware and software with attention to user experience

UT Dallas Robotics Research Intern — Summer 2015
- Built human control interface for COMEX, a robotic exoskeleton designed to help get paralyzer patients back on their feet, using NI MyRio and Arduino micro-controllers
- Decoded and processed I2C signals for controls programming

Siemens Taiwan Summer Intern — Summer 2013
- Programmed smart light switches in a local hospital to achieve 53% energy savings per day

Awards

Best Use of Artificial Intelligence, UCSD COGS 120 HCI Design — Spring 2017
- Won best use of AI out of 50+ teams.
- Designed web app Tonalysis that analyzes the emotions of UCSD professors' podcast lectures to assist students in course selection
- Built with Node.js, Angular.js, Bootstrap, Python for webscraping, and IBM Watson AI emotion analytics API while adhering to RESTful design practices

Best Final Project, UCSD COGS 8 Hands On Computing — Winter 2016
- Won best individual project out of 20+ people by building a Arduino beverage dispensing robot

Projects

Homemade 3D Printer — Summer 2016
- Designed and built a homemade 3D printer from scratch using scavenged recycled motors, power supply, and mechanical parts, with firmware written in C and an Arduino Mega as micro controller
- Held online workshop and offered printing services for fellow students, created items including laptop stands, models, mechanical part replacements, etc.

Stratos — Fall 2016
- Designed and prototyped a physical weather visualizer using a Raspberry Pi, water pump, LED lights, and mister to simulate forecasted weather conditions such as clouds, rain, thunder, and sun
- Built front end to pull weather data using SimpleWeather.js library and communicate with Raspberry Pi backend Apache server with PHP

Technical Proficiency

NodeJS, Python, PostgreSQL, RabbitMQ, Docker, Mesos, Scylla, Git, UNIX, Arduino, Raspberry Pi Personal webpage at http://syueric1102.github.io and robotics blog: http:/syuslab.blogspot.com/