EVAN TAM

SOFTWARE ENGINEER AT USEFULR

etam103.github.io
evan-tam-25318373
etam103

I am very passionate about creating new inventions that will benefit society in the future. I am always intrigued and opened to trying new ideas.

Youtube: http://youtu.be/uc6CfEbCXVA

Skills

C++, NODE JS, JAVASCRIPT, SWIFT, ANDROID, PYTHON, JAVA, COMPUTER VISION, POSTGRESQL, MONGODB, SQLITE

Education

San Diego State University-California State University
Bachelors Computer Science 2015

Activities and Societies:
ACM

Employment

Usefulr — San Diego
Software Engineer (Founding Team Member) — Jan 2016 to Current

IvaThat
- Led the development of a virtual assistant iOS application that allowed user to teach the assistant new behaviors without programming.
- Built with Node, Express, Passport, Postgres, PM2, NGINX, Lets Encrypt, Digital Ocean, Morgan, MySqlWorkBench, Postman, Swift, Alamofire, GoogleSignin
- Designed database architecture

BehaveOs Robotics
- BehaveOs is a proprietary AI engine that leverages aspects of reinforcement learning and hebbian learning which enables devices to be able to be taught with human interaction.
- Developed distributed robot control logic and diagnostics.
- Developed a Teachable Robot to demo that an off the self robotics platform can leverage BehaveOs to be able to have the ability to be able to be taught autonomous behaviors, built with Raspberry pi, Swift, C++, Python, OpenCv, Computer Vision, ASR
- Developed a Robotic Arm with lego mind storm to demonstrate that with BehaveOs, a person can teach an arm movement, similar to Baxter Robotics, just by moving it manually, built with Python, Swift

Postal Pocket
- Developed mail recognition and notification system.
- Led the development of the image recognition system using OpenCV and C++.
- Built with Node, Express, Passport, Socket.io, MongoDb, Sqlite, EJS(Embedded JavaScript), Node-Gyp, C++, OpenCv, DigitalOcean, Postman, Computer Vision, PM2, NGINX, Lets Encrypt

San Diego State University — San Diego
Machine Learning Researcher — Oct 2015 to Dec 2015
Generated data set using DJI Phantom for 3D scene reconstruction

Gimbal Inc. — San Diego
Software Engineer Internship at Gimbal, Inc. — 2015 to 2015
- Responsible for testing Gimbals Android framework using test suite.
- Tests involved testing battery life from beacon to Android app, maximum range of bluetooth signal, accuracy
- Enhanced Android testing framework
- Developed new tests

Qualcomm CRD — San Diego
Software Engineer Internship at Qualcomm — May 2015 to Aug 2015
- Developed a Vision Based Target Tracking System using SnapDragon Technologies to allow autonomous following behavior for drones
- Worked with GStreamer library and wrote C++ to grab HSV video frames from drone to display on Android Application
- Wrote JNI wrappers to wrap GStreamer C++ to be able to talk to the Android Java UI layer
- Worked with QCT computer vision library to develop tracking algorithm
- Implemented Virtual JoySticks for Android Application to fly drone
- Was able to perform yaw, pitch, and roll motions with Virtual JoySticks and fly drone successfully using Android Application alone

Qualcomm Labs — San Diego
Software Engineering Intern at Qualcomm — May 2014 to Aug 2014
- Worked and owned Android app that was used for the autonomous wheelchair project
- Implemented a framework to generate heat maps on Android
- Created a security feature using android's built in touch api, which stored the dimensions of your hand into Android's sqlite database. This allows access to the wheelchair Android application with five finger touch authentication
- Used Async-Http Android library to communicate with our PHP server's rest api to grab realtime data from micro controllers attached to the wheelchair
- Used AChartEngine Android library to create realtime graphs in order to monitor and diagnose the wheelchair

Tricorder X-Prize — San Diego
Program Manager/Software Engineer at SDSU X-Team — Jul 2013 to Jan 2014
The focus of the SDSU X Team is to provide a solution for the Qualcomm Tricorder X Prize competition. My team is using an Android base platform to develop a Tricorder that can perform an accurate diagnosis. My responsibilities for this project involve coordinating with 10 software developers as well as developing an efficient UI on an Android Platform.

Projects

HealthTrak — Aug 2015 to Dec 2015
Worked with a team to create a health care webapp using Node.js, Express, PostgreSQL, and AngularJS for CS 532 Software Engineering. Responsible for interacting with and negotiating the terms with our "client", assigning tasks, conforming to agile practices, and more.

Activities

Vice President of ACM — Aug 2011 to Aug 2013
Responsible for communicating with the undergrad computer science students to inform them about speakers that were in the industry as well as helping create the event to host the speaker. Organized technology workshops for students.