Ayush Jain

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EDUCATION

CUPERTINO HIGH SCHOOL
June 2017 | Cupertino, CA

USC
Expected June 2021 | Los Angeles, CA

SKILLS

PROGRAMMING
Languages:
Python • Java • Octave/Matlab
Javascript • C++ • Shell • HTML/CSS
Libraries & Frameworks
OpenCV • NodeJS
Numpy • Pandas
Angular • Firebase
Tools
Unity • Maya • Photoshop • Illustrator

PROJECTS

AR-DRONE
An autonomous indoor drone navigation program using the Parrot AR Drone. It uses various computer vision algorithms to understand its surroundings.

SCRIBE
HackingEDU
An optical character recognition program for helping students study from their textbooks. Using Google's Tesseract for OCR and a neural word embedding called word2vec in order to convert pictures from a textbook page into practice quiz questions.

BUTLER
Los Altos Hacks
An intelligent slackbot for managing teams and projects. Butler uses a natural language processing engine to parse intents and manage github and slack organizations.

HONORS & AWARDS

Google Foobar Challenge
1st Place @ HP Code Wars
Social Network Award @ Make Hacks
Myo & Autodesk Award @ AngelHack

EXPERIENCE

FALKONRY | Software Engineering Intern
Sept 2017 – Present | Sunnyvale, CA
- Utilized Falkonry software to isolate early warning patterns in EEG data of epilepsy patients
- Developed "kestrel" to automate core algorithm testing.
- Created preanalyzer to determine an optimal subset of signals to be used in training.

DRONESDASH | CTO & Co-Founder
July 2016 – Aug 2017 | Menlo Park, CA
- Developed computer vision and machine learning solutions in order to authenticate users during delivery
- Leading core product development to develop coordinated drone network and client-side app

TECHLAB EDUCATION | Software Engineering Intern
May 2015 – Aug 2015 | Saratoga, CA
- Led various programming classes teaching teens and children how to code(Web Development, IOT, Python)
- Collaborated with other interns to redesign the Techlab website and work on an aquaponics system.

CHS ROBOTICS | Software Captain
Oct 2013 – June 2015 | Cupertino, CA
- Managed team 7128's software team which included motivating and mentoring freshman and sophomore teammates.
- Oversaw autonomous and drive code and maximized team efficiency within a constrained time period.

RESEARCH

DEXTO | Electromyography Research
July 2015 – Dec 2015 | Cupertino, CA
Worked with Rohan Iyer and Stuart Rucker to develop a prosthetic modeling and positioning software. Implemented naive bayesian classification algorithm and low pass filters + constant pass standard deviation formula to interpret real time electromyographic signals into gesture events.

ISTITCH | Computer Vision + Diabetes Research
June 2015 – August 2015 | Saratoga, CA
Worked with Yash Vaishnav, an M.D. Candidate, and Stuart Rucker to develop a image processing program to classify patients with diabetes from videos of their corneal sub-basal nerve plexus. Used OpenCV image stitching tools and vector trees of the detected nerves to calculate fiber tortuosity, branch density, etc. for classification.

PATENTS

Binary Flash Authentication | Patent No. 15246258