Andy Zhang

Software Tools

Git, OpenCV, UNIX

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EDUCATION 2016 - 2019 **Cornell University** B.S., Computer Science | Minor, Electrical Engineering Relevant Coursework: Honors Data Structures // Signal Processing // UNIX Scripting GPA 3.93/4.0 **EXPERIENCE Computer Vision Developer** 2016 - present Cornell Unmanned Air Systems (CUAir) CUAir is a project team that designs, builds, and tests an autonomous aircraft system for the Student Unmanned Air Systems (SUAS) Competition. Currently working on detection, segmentation, and classification modules as part of the Computer Vision subteam. **Controls and Electrical Engineer** Cornell Hyperloop 2016 - present Cornell Hyperloop is a project team working to design, build, and test a full-scale pod capable of traveling at 200mph on a bed of compressed air. The pod is submitted to the annual Hyperloop Pod Competition hosted by SpaceX. Currently part of the Controls and Electrical subteams. **Morphometrics Research Intern** University of California, Santa Cruz Researched the trends in the morphology of nautiloids and ammonites using Fourier analysis and 2015 - 2016 Principal Components Analysis. Conducted under the supervision of Prof. Matthew Clapham and mentor Dan Killam. **PROJECTS** Cell ID Spring 2017 Computer vision project using OpenCV and Python to process images of white blood cells and classify them as one of five types to detect and diagnose blood-related diseases. **Critter World** Fall 2016 Simulation of a world with "critters" modeled by a custom language, compiler, interpreter, and GUI. The world is maintained by a server, and multiple clients connecting to the world can request updates to the world state, which is tracked by a diff. Made with Java. Spring 2015 MagaFoods Android application using the Yelp and Google Maps APIs to present a visual restaurant search function. Primarily used Java for the application, and JSON for API calls. IceBox Spring 2014 Functional prototype of a thermoelectric cooler that can charge cell phones using temperature differentials, per the Peltier effect. **SKILLS Programming Languages** Java (5/5), Python (4/5), C++ (3/5), MATLAB (3/5), HTML/CSS (3/5), R/RStudio (2/5)