Andrew Campbell

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EDUCATION

University of California, Berkeley | Berkeley, CA　　　　　　Graduation: May 2019
B.A. Computer Science
GPA: 3.91

Coursework: Algorithms, Machine Learning, Operating Systems, Databases, Networking, Security, Computer Architecture, Data Structures, Artificial Intelligence

EXPERIENCE

Software Engineering Intern | Yelp　　　　　　　　May 2018 - August 2018
San Francisco, CA
- Shipped and monitored experiments with feature toggles to analyze the conversion-rate impact of user-facing changes, including a new same-page checkout flow on web.
- Added profanity filtering on mobile waitlist requests to prevent the surfacing of foul language inside restaurant kiosks.
- Created API for banner notifications of upcoming reservations in the Yelp mobile app.
- Created reusable React components to improve visual consistency across services.

Software Engineering Intern | Captricity　　　　　　May 2017 - August 2017
Oakland, CA
- Implemented an automatic perspective transform and noise reduction algorithm to pre-process batch files in the backend, along with a front-end repair interface.
- Created a new Angular front-end with extended features to improve an existing data quality tool used by customers and staff.
- Developed an exporting service to send digitized data to AWS Lambda for validation.
- Built an API for submitting asynchronous batch tasks to Celery.

Academic Intern / Reader | UC Berkeley　　　　January 2016 - December 2017
Berkeley, CA
- Lab assistant for CS61B, the Java-based data structures course in Fall 2016. Helped students analyze code performance, write tests, use version control, and debug projects.
- Reader and tutor for UC Berkeley's Introduction to Astronomy course Fall 2016 and 2017. Coordinate course events and host office hours.

PROJECTS

All code available at github.com/andrewdcampbell.

OpenCV Document Scanner　　　　　　　　　　　　　　　　　2017
- An interactive program using OpenCV to process images of documents in bulk. Automatically detects the corners of a misaligned or poorly lit image and applies a perspective transform and adaptive threshold to clean it up.

Algorithmic Markov Music Generator　　　　　　　　　　　　　2016
- A Max/MSP program that parses an input song file and uses second-order Markov chains to produce an infinite stream of MIDI notes with randomized pitches, velocities, and durations at changing tempos.

Pacman AI　　　　　　　　　　　　　　　　　　　　　　　2016
- A team of offensive and defensive Pacman agents made to compete in a Capture the flag contest for CS188 (Artificial Intelligence). Used reinforcement learning to finish second place in class size of 500+.

SKILLS

Languages: Python, Java, C, JavaScript, SQL, HTML/CSS
Frameworks: Django, React, Angular, Celery, Pyramid
Tools: Git, AWS, Docker, Google Analytics, Splunk, PyCharm