Tony Situ

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EDUCATION

UC BERKELEY
BS IN ELECTRICAL ENGINEERING AND COMPUTER SCIENCE
Expected May 2018 | Berkeley, CA
Conc. in Software Engineering
College of Engineering
GPA: 3.607

LINKS

Github:// **c2tonyc2**
LinkedIn:// **c2tonyc2**

COURSEWORK

Discrete Math and Probability Theory
Machine Structures
Information Systems and Devices
Artificial Intelligence
Productive Use of the Unix Environment
Databases Systems
Internet Architecture and Protocols
Algorithms and Intractable Problems

STUDENT & LAB ASSISTANT
Structure and Interpretation of Programs
Data Structures

SKILLS

PROGRAMMING
Experienced:
Python • Django • Unix
Proficient:
Java • JavaScript • CSS
HTML • PostgreSQL
Familiar:
C • C++ • Ruby on Rails

SOFTWARE
Experienced:
Openstack • Docker • Git
Proficient:
Ansible • libvirt

AWARDS

Regents' and Chancellor's Scholar
Rose Hills Foundation Scholar
Bronze Excellence Award (EMC)

CERTIFICATIONS

Cloud Infrastructure and Services

EXPERIENCE

EMC | SOFTWARE ENGINEERING INTERN (NEUTRINO ENGINEERING)
May 2016 – August 2016 | San Francisco, CA
- Scripted networking procedure behind expanding/changing floating IP blocks; also added rigorous error catching, logging, metadata backups, along with automatic usage case detection for a simple and scalable user experience.
- Improved automated testing suite with additional verification jobs in Jenkins.
- Integrated and debugged an object storage component for the cloud platform.
- Refactored Django Middleware in the platform to catch misformatted requests.
- Collaborated on proof of concept for Octavia integration, a VIP feature for future versions. Octavia provides Load Balancing as a service (LBaaS) for TLS support, L7 switching, fault tolerance, massive scalability, and high availability.

BERKELEYTIME | BACKEND SOFTWARE ENGINEER
May 2016 - Present | Associated Students of the University of California
- Maintained an online student resource with over 150,000 unique visits/year.
- Building scheduler application to replace current class enrollment procedures.

MCORELAB | SOFTWARE ENGINEERING INTERN
June 2015 – Aug 2015 | Reno, NV
- Extended API of OpenStack (Horizon and Nova) to include new features.
- Developed GUI and web framework for a memcached management platform.
- Automated product installation and patching on remote servers.
- Scripted vNIC attachments and vCPU affinity assignments for virtual instances.
- Adapted ini file parser to allow users to customize default cloud configuration settings and launch parameters for instances.

UC BERKELEY ACADEMIC INTERN | LAB ASSISTANT
Jan 2015 – Present | University of California, Berkeley
- Cooperated with staff members to prepare, review, and debug the curriculum.
- Tutored various students to facilitate their understanding of core CS concepts.

AIR QUALITY SENSORS | UNDERGRADUATE RESEARCH APPRENTICE
Februrary 2016 - May 2016 | Berkeley Institute of Data Science
- Collected telemetry from Manylabs air quality sensors and ran raw data comparisons against EPA readings to measure the difference in performance.
- Applied algorithms on the Manylabs sensors to improve accuracy of the data to best match the control (EPA) reducing error to within acceptable margins.
- Visualized the data and allowed users to query for local information.

PROJECTS

MTG ARCHETYPE ANALYSIS
- Developed a Scrapy spider and scheduled a cron job to routinely deploy the spider, scrape MtG tournament tracking domains, and update data on the meta.
- Web app built using Django which handled data from the spider and users.
- Used D3 to visualize percentage distributions for each query to a certain card.

OPTICAL CHARACTER RECOGNITION WITH TENSORFLOW
- Implemented perceptron algorithm and gradient descent used for training.
- Designed features and trained a convolutional neural net to self-learn features.
- Tuning hyperparameters for optimal learning rate, momentum, and batch size.
- Testing classifiers on a set of handwritten digit images with 88% accuracy so far.