

QITAO LI

UC Berkeley
2014-2018

CONTACT

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<https://github.com/cosmicac>

CREDENTIALS

Passed Society of Actuaries:
Exam P (probability)

LANGUAGES

Python
Java
R
HTML/JS/CSS
C
C++
Scheme
SQL
MIPS Assembly

SKILLS

Tools:

Git, Unix, Bash,
LaTeX, Cron, Selenium
Selenium, REST APIs

Machine Learning:

SVMs, Neural Networks,
Random Forest,
Gradient Boosted Trees,
Linear/Logistic Regression

Packages/Frameworks:

NumPy, SciPy, Pandas,
scikit-learn, Tensorflow,
Statsmodels, matplotlib
nlTK, SQLAlchemy, Flask

EXPERIENCE

SOFTWARE DEVELOPMENT INTERN - AMAZON LAB126

May 2017 - August 2017

- . Built a service to perform **automatically detect regressions and improvements** between builds by performing **hypothesis tests** on millions of Kindle metrics.
- . Backend implemented by scheduling weekly **SQL** jobs to query **Redshift** and batch-analyze data with **statsmodels** and **SciPy**.
- . **Detected and alerted a PM** to a **critical regression** involving power consumption.
- . User-friendly dashboard built with **Flask** backend and **HTML/JS/CSS** with Bootstrap frontend

RESEARCH - UCSF ARTHRITIS IMAGING LAB (Xiaojuan Li)

September 2016 - May 2017 (<https://github.com/cosmicac/ucsf-mri-seg>)

- . Implemented an **convolutional neural network** in **Tensorflow** with **3D convolutions** to segment out tissue with synovitis (rheumatoid arthritis symptom).
- . Trained with an **end-to-end** symmetric down-sampling and then up-sampling architecture, with a **dice coefficient** loss function.
- . Used affine transform. and other distortions to deal with **small dataset (n=61)**.
- . Achieved average dice-coefficient of **0.61** on a test set of 10 images.

SOFTWARE ENGINEER TEST INTERNSHIP - CITRIX

May 2016 - August 2016

- . Worked as the **sole** Test Engineer on GoToMeeting's meeting service backend team
- . Wrote and maintained a REST api test suite written in **Java** with Spring and TestNG
- . Wrote automation that **located and prevented expensive errors** in the core service infrastructure (intermittent 500 errors, etc)
- . Localized automation written with **Selenium Webdriver** for GoToMeeting frontend to seven different locales

AUGMENTED REALITY PLATFORM ON LUMUS - VR@B

January 2016 - May 2016

- . Standardizing code by writing a SDK for the project in **C++**
- . SDK includes Camera/IMU calibration, depth map retrievals, fingertip detection
- . Uses Lumus DK-32, depth camera with attached RGB camera
- . Uses **OpenCV** to achieve plane detection and fingertip tracking

BITMONSTER - CALHACKS 2015

October 2015 (<https://github.com/1heart/calhacks>)

- . Webapp made with 2 teammates - won best use of Blockchain API award (**\$20000**)
- . Conduct Bitcoin transactions with aliases, reputation, and Venmo-ish features.
- . Made with **Flask** backend and React frontend - worked on backend (**Python/Flask**)

EDUCATION

Univerisity of California, Berkeley

2014-2018

Majors: **Computer Science and Statistics**

GPA: 3.62

Relevant Coursework

(A) CS61A (SICP)	(A) Math 53 (Multivar. Calc)
(B+) CS61BL (Data Structures)	(A) Math 54 (Linear Algebra)
(B+) CS61C (Machine Structures)	(A) Math 104 (Real Analysis)
(A-) CS70 (Discrete Math and Prob.)	(A-) Math 110 (Linear Algebra)
(A-) CS188 (Artificial Intelligence)	(A-) Stat. 134 (Concepts of Probability)
(A-) CS189 (Machine Learning)	(A) Stat. 135 (Concepts of Stats.)
(A-) CS170 (Algorithms)	(A) Stat. 133 (Computing With Data)
(B) CS162 (Operating Systems)	(B) Stat. 154 (Machine Learning)