Kelvin Lu

python loving bicycle riding adventure time watching coffee fuelled software engineer

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Employment

Square **Software Engineer**

San Francisco, CA ⟨2016 - present⟩

- Works with a small team to maintain and develop CI/CD systems for Square's mobile and embedded software engineers.
- Operates at various levels of the stack; including handling bare metal, administering Unix systems, and maintaining applications.
- Develops software for build/test systems, automated provisioning, configuration mangement, metrics collection, and error reporting.
- Other responsibilities include DevOps, on-call rotations, worker cluster management, and bare metal servicing.

Strava **Software Engineering Intern**

San Francisco, CA ⟨Summer 2015⟩

- Overhauled an aging system that feeds the in-app ad targeting service and e-mail campaigns.
- System aggregates and persists data for millions of Strava's users.
- Migrated the process from a predominantly MySQL and Ruby base to utilize AWS Redshift and Apache Spark.
- Reduced daily job time from upwards of 3 days long to 3 hours.
- Contributed features to the core backend Ruby on Rails app.

Organizations

Davis CS Club **Vice Chair, Web Dev. Committee**

Davis, CA ⟨2014-2015⟩

- Lead web development workshops for beginning students.

Davis CS Club **Tutor**

Davis, CA ⟨Spring 2014, Fall 2014⟩

- Tutored students in lower division computer science courses.
- Reinforced object oriented, data structure and algorithm concepts.
- Increased students' understanding of core computer science ideas.

Projects

krotos-convnet github.com/KelvinLu/krotos-convnet June 2016

- Personal project for experimenting with machine learning and learning to use TensorFlow.
- Utilizes neural network and matrix factorization models.
- Scrapes song audio from 7digital and attempts to identify musical themes and perform latent vector space mapping.

Senior Design Project (coursework) Jan 2016

- Worked in a team of four to build a system to aggregate and process data from an in-flight DJI Phantom 3, via the DJI SDK.
- Proof-of-concept service to log overparked vehicles via automated drones.
- Utilizes license plate recognition libraries and a message queue, web-driven, multi-process system to perform function.

Education

University of California, Davis

College of Engineering, Class of 2016

B.S. Computer Science and Engineering

coursework

2013	object-oriented programming
	data structures and programming
	machine dependent programming
2014	computer architecture
	programming languages
	probability and statistical modeling
2015	algorithm design
	software engineering
	computer networks
	operating systems
	computer vision
	information design
	machine learning
2016	embedded systems
	computer security

awards+honors

Dean's List, College of Engineering × 8 Quarters

Edward Kraft Prize Recipient

Technical Skills

languages

proficiency	*familiarity*
Ruby	R
Python	MATLAB
Java	Octave
Scala	
JavaScript	
C++	
C	
HTML, CSS	

frameworks, libraries, services, tools

Apache Spark	Jenkins
Apache Cassandra	Sentry
Chef	Redis
Ansible	PostgreSQL
Puppet	MySQL
AWS S3	Pandas
AWS Redshift	SciPy
AWS SNS	NumPy
AWS SQS	TensorFlow
Ruby on Rails	AngularJS
Django	jQuery
Flask	Foundation