

# Pinglei Guo

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## Education

### UCSC(University of California Santa Cruz)

M.S. IN COMPUTER SCIENCE

Santa Cruz, California

Sep. 2016 - Present

### SJTU(Shanghai Jiao Tong University)

B.S. IN MATERIALS SCIENCE

Shanghai, China

Sep. 2012 - June 2016

## Skills

<b>Experienced</b>	Git, Golang, PHP, JavaScript (Node.JS), HTML, CSS, MATLAB, AngularJS, Express, Laravel
<b>Intermediate</b>	Java, Ruby, Python, SQL, MySQL, Redis, Rails
<b>Basic</b>	Scala, C, Shell, Docker, Hadoop, HBase, Hive

## Experience

### Systems Research Lab: Research assistant

TECH: CASSANDRA, DOCKER, CONSUL, JEPSEN

- Work on hybrid distributed time series and graph database for analytics as master thesis
- Validate distributed systems correctness by using and extending Jepsen with PhD students

UC Santa Cruz, California

Oct. 2016 - Present

### CIT Lab: Research assistant

TECH: JAVA, NETTY, KAIROSDDB, CASSANDRA, ZOOKEEPER, KAFKA, PROTOBUF, SIGAR, DROPWIZARD

- Build a distributed system monitoring and predicting prototype with China Telecom Shanghai
- Coauthored the paper *CPU load Prediction based on a multidimensional spatial voting model*

Shanghai Jiao Tong University

March. 2015 - Nov. 2015

### GitCafe: Software Engineer Intern

TECH: GIT, RUBY, RAILS, ELASTICSEARCH, SCSS, JQUERY

- Optimize markdown parser and improve user subscription logic

Shanghai, China

Jan. 2015 - March 2015

### Dongyue Web Studio: Full stack web developer & President

WEBSITE: [HTTP://DONGYUEWEB.COM](http://dongyueweb.com) TECH: GIT, PHP, JAVASCRIPT, MYSQL, REDIS, ANGULARJS

- Lead web and mobile development of <http://tongqu.me>
- Build RESTful API and rich internet application using Laravel, AngularJS and Bootstrap

Shanghai Jiao Tong University

Sep. 2013 - Jan. 2016

## Project

### Tongqu.me (Online event booking & social platform): Project Leader & Tech Lead

WEBSITE: [HTTP://TONGQU.ME](http://tongqu.me) TECH: MYSQL, REDIS, MESSAGE QUEUE, RESTFUL API, SOCKET.IO

- Handle concurrency by using Redis for cache and rate limit, increase QPS by 120% for special event
- Increase daily active user from 5,00 to 3,000. Became the most popular in campus mobile app
- Support booking movie tickets and sports venues, integrate with Alipay for online payment

Shanghai Jiao Tong University

Sep. 2013 - March 2015

### Xephon-B: Time series database benchmark: Project Leader

REPO: [HTTPS://GITHUB.COM/XEPHONHQ/XEPHON-B](https://github.com/xephonhq/xephon-b) TECH: MESOS, KUBERNETES, DOCKER, GOLANG

- A novel benchmark tool and standard for (distributed) time series databases specifically
- A platform where researchers and vendors can share their benchmark result and compare both vertically and horizontally

UC Santa Cruz, California

Oct. 2016 - Present

### Distributed systems monitoring and predicting prototype: Tech Lead

TECH: JAVA, NETTY, KAIROSDDB, CASSANDRA, ZOOKEEPER, KAFKA, PROTOBUF, SIGAR, DROPWIZARD

- Found memory and disk usage problem of a China Telecom Strom cluster
- Store and query infrastructure metrics using KairosDB (a time series database based on Cassandra). Using Netty for internal protocol.

Shanghai Jiao Tong University

March 2015 - Nov. 2015

### Scala linter: Project Leader

REPO: [HTTPS://GITHUB.COM/AT15/SCALA-LINTER](https://github.com/at15/scala-linter) TECH: SCALA, COMPILER, FUNCTIONAL PROGRAMMING

- A compiler plugin that checks dead code and style problems. Generate autofix and html report
- Contribute to Scala official documentation

Shanghai Jiao Tong University

March 2015 - June 2015