

Pinglei Guo

EDUCATION

2016 – PRESENT **MS. Computer Science**
University of California Santa Cruz

2012 – 2016 **BS. Material Science**
Shanghai Jiao Tong University, China

WORK EXPERIENCE

January 2015 – March 2015
Software Engineer, GitCafe, Shanghai, China
Optimize ruby markdown parser. Fix encoding problem in rugged. Improve user subscription logic.

September 2013 – January 2015
Full stack web developer, Dongyue Web Studio, SJTU
Build RESTful API and microservice using modern PHP, NodeJS frameworks like Laravel, Express. Develop responsive user interface using Bootstrap and AngularJS. Build internal tools for continuous integration, monitoring and alert.

RESEARCH EXPERIENCE

October 2016 – Present
Research Assistant, Systems Research Lab, UC Santa Cruz
Work on hybrid distributed time series and graph database for analytics as my master thesis. Work with other PhD students on validating distributed systems consistency.

March 2015 – November 2015
Research Assistant, Shanghai Jiao Tong University, China
Build a distributed system monitoring and prediction prototype and used on a Storm cluster in China Telecom, Shanghai. Coauthored the paper *CPU load Prediction based on a multidimensional spatial voting model*.

July 2015 – September 2015
Research Assistant, Victoria University, Australia
Estimate Australian Football League Sports men's commercial value. Build a web crawler embedded into ASP.NET web application to get performance. Using text mining to get evaluation from social media and press. Combine athlete's performance with evaluation to generate rank and estimated value.

PROJECT EXPERIENCE

October 2016 – Present, UCSC
Xephon-B: Time series database benchmark *Project leader*
A specific benchmark tool for (distributed) time series databases. And a platform to let researchers and vendors share their raw benchmark result that could be queried by other people.
March 2015 – November 2015, SJTU & China Telecom
Distributed Systems monitor and prediction *Member*

🏠 at15.github.io
✉ at15@outlook.com
🔄 github.com/at15
in www.linkedin.com/in/at1510086

Store and query infrastructure metrics using KairosDB (a time series database based on Cassandra). Implement internal transport and control protocol using Netty. Interactive visualization dashboard using AngularJS and vis.js with streaming chart support. REST API using Dropwizard. Predict and alert ahead.

November 2015 – January 2016
B+ index for Hive *Project leader*
Build and store B+ index for Hive. Support point and range query with built in cache using memory or Redis. Dashboard and API using AngularJS and Spring framework.

October 2015 – December 2015
Search Engine based on Hadoop *Project leader*
Build multithread crawler to abstract data from forums. Use Map-Reduce to generate inverted index and store in HDFS. Provide REST API using Spring framework.

March 2015 – June 2015
Scala linter *Project leader*
Build Scala compiler plugin to check dead code. Contributed to Scala official documentation.

PUBLICATION

CPU load prediction based on a multidimensional spatial voting model Yu Chen, Jian Cao and **Pinglei Guo**, *2015 IEEE International Conference on Data Science and Data Intensive Systems*. IEEE, 2015

OPEN SOURCE PROJECT

AYI A cross platform util application written in Golang

LINTER Scala dead code detection compiler plugin

PROGRAMMING LANGUAGE

EXPERIENCED Golang, PHP, JavaScript, MATLAB

INTERMEDIATE Java, Ruby, Python, SQL

BASIC LEVEL C, C#, Scala, shell

SOFTWARE & FRAMEWORKS

EXPERIENCED Git, AngularJS, jQuery, D3.js, Bootstrap, Laravel, Express

INTERMEDIATE MySQL, Redis, Rails

BASIC LEVEL Docker, Nginx, Hadoop, HBase, Hive