

# Pinglei Guo

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## EDUCATION

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MS. Computer Science	University of California Santa Cruz	GPA 4.0	Sep. 2016 – March 2018
BS. Material Science	Shanghai Jiao Tong University	GPA 3.3	Sep. 2012 – June 2016

## WORK EXPERIENCE

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PayPal: Software Engineer Intern San Jose, California June 2017 - Sep. 2017

- Built admin server for internal **container orchestration** platform using **Go**. Deployed in **production** on **Mesos** using **Docker**.
- Enhanced dashboard using **Angular 4**, used by operation team to troubleshoot Java, Node application and manage cluster itself.
- Introduced full text search using **Solr**, **open sourced** Go client with enhanced performance and support for SolrCloud.
- Furthered continuous integration (**CI**) and deployment (**CD**) in QA using **Jenkins** and **Docker**.

GitCafe: Software Engineer Intern Shanghai, China Jan. 2015 – March 2015

- Reduced **Ruby on Rails** application load time by 5% through optimizing regular expression in markdown parser.
- Fixed user subscription logic, solved 20% pricing related user tickets.

Dongyue Web Studio: (Part-time) Full stack web developer & Tech lead Shanghai, China Sep. 2013 – Jan. 2016

- Utilized **Redis** as cache and rate limiter, increased QPS by 120%, reduced database load by 40%, filtered out most bot traffic.

## PROJECT EXPERIENCE

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Distributed Time Series Database University of California Santa Cruz Nov. 2016 – Present

- Implemented a distributed time series database on top of **Cassandra** in **Go**. Support both **JSON** and **Protobuf** via HTTP/2.
- Designed a **columnar format** modeled after **Parquet** and **InfluxDB** with higher compression and less write amplification.
- Created **benchmark suite** for Xephon-K, OpenTSDB, KariosDB, InfluxDB and a consistent client interface for different TSDB.

Distributed systems monitoring prototype Shanghai Jiao Tong University Mar. 2015 – Jan. 2016

- Enhanced monitoring system for distributed system using **Cassandra** and **MongoDB** written in **Java** and **C++**.
- Deployed in China Telecom's **Kafka** cluster, detected **anomaly** in disk capacity and memory, improved **capacity planning**.

## SKILLS

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Language	Go, Java, JavaScript, TypeScript, PHP, Python, SQL, C++, Shell
Database	Cassandra, Solr, MySQL, MongoDB, Redis, Elasticsearch, KairosDB, OpenTSDB, InfluxDB, Prometheus, Graphite
DevOps	Docker, Vagrant, Ansible
Framework	Angular, Laravel, Spring, Dropwizard, Express, Rails, CUDA, Aurora