

# NATHAN KONG

[NATEWKONG@GMAIL.COM](mailto:NATEWKONG@GMAIL.COM) | 408.644.0444

## EDUCATION

M.S. Computer Science, San Jose State University, (May, 2017)  
B.S. Mechanical Engineering, Business minor, San Jose State University

## PROJECTS

Failover Mechanism in Distributed SDN Controllers (Java) - A failure detection and recovery strategy for Software Defined Networking controllers in a distributed architecture for LTE telecommunications.

Snowboard Signup (HTML, CSS, JS, JQuery, Apache, Docker, MySQL, PHP) - A group signup sheet for various passes to Vail resorts.

QoS for Containers in Cloud Computing (CloudSim) - Quality of Service provisioning for containers was created in a cloud architecture (CaaS). Priorities was created for containers and bandwidth was dynamically adjusted.

Simple Bottle (HTML, CSS, JS, JQuery, AerCloud, Node) - IoT smart pill bottle to help with prescription drug abuse. Used Tessel 1 board to simulate pill bottle. Smart pill bottle information is sent to the cloud for medical staff review.

Frequent Itemsets (Java) - A frequent itemset algorithm for a sliding window in Apache Spark. Found similar artists based on genre.

P2P chat - (Java) Peer to Peer chat application.

IntTips – (Java) A simple tip calculator built for Android. It ceiling rounds the total bill with a 15% tip to an integer value.

## EXPERIENCE

Findlaw (<http://www.findlaw.com/>)

- Migration of web content to Adobe CQ 5.6.1
- Redirection of Legacy Domains
- Research on Google PageSpeed insight for images
- Project coordination for state code - <http://codes.findlaw.com>

Chicago Bridge and Iron formerly (Shaw Environmental and Infrastructures)

- Project coordination with team members including: Engineering, Accounting, Procurement, Document Productions, and Labor forces.
- PLC Programming (similar to Arduino but for industrial systems) for control systems with data collection and safety interlocks.
- Tested and troubleshot integration of programming to human machine interfaces (HMI), Supervisory Control and Data Acquisition (SCADA) systems.
- Developed manuals for control systems
- Installation, testing, and maintenance of temperature and pressure sensors as well as blowers, pumps, dryers, and heat exchangers

## Links

<https://natekong.github.io/>

<https://www.linkedin.com/in/nathanwkong>

<https://www.github.com/natekong>