

# NATHAN KONG

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

## EDUCATION

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

## PROJECTS

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

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

SDN for LTE - Integrated a Software Defined Networking system in LTE telecommunications architecture to make a 5G telecommunications network.

Simple Bottle - 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.

Software Defined Wireless Sensor Network - A Software defined wireless sensor network for a Body Area Network in a healthcare system.

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

P2P chat - Peer to Peer chat application. Information initialization and monitoring from STUN server. UDP and TCP connections.

Project Tracking – A SaaS for project tracking of line items and associated materials.

IntTips – A simple tip calculator built for Android. It rounds the integer values for any percentage tip. The default is 15% and 18%.

## 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)

- Programmed PLC (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

## Links

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

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

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