# Jonathan Ng Systems Design Engineering 2A

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#### Skills

languages: Java, C++, Python, Scala, HTML/CSS,

PBasic, Bash, Groovy

**technologies:** Git, PostgreSQL, Solr, Redis, Google Cloud Datastore, Jenkins, Nexus, Sonarqube, Sonatype, Veracode, Atlassian toolstack, Eclipse, Vim

## Experience

#### TD Bank(2017)

DevOps Engineer

- Administrator over Atlassian Toolstack responsible for providing users with recommendations and performing requests for Crowd, JIRA, Bit-Bucket and Confluence
- Updated a Groovy script which used the Bit-Bucket REST API to perform attestation on project teams
- Updated a Groovy script which compiled Jenkins Build Scan information to be sent out in a daily report to project teams
- Migrated several projects over from different outdated instances of Jenkins
- Reduced time taken to perform migrations between Jenkins instances for large projects from 2+hours to 5mins
- Increased efficiency of project migration by creating shallow copies of projects reducing storage requirements
- Provided a recommendation and setup a mock for a user management permissioning model for Sonarqube
- Created and evaluated several proof-of-concepts for the continuous integration pipeline

#### Rave Media Inc(2017)

Backend Engineer

- Transitioned Video service to retrieve metadata from Google Cloud Datastore instead of PostgreSQL for more consistentency from transactions
- Refactored user management service written in Scala by making codebase more consistent and reducing queries performed
- Reduced Solr querying in half by fixing a bug which caused undesired deletion of data
- Used bootstrap to setup a more responsive mobile project site

#### **Projects**

### Raspberry Pi RC Car

• Used Python to communicate accelerometer data from a mobile device to a Raspberry Pi

#### Physical Maze Solving Robot

 Programmed a microcontroller running a PBasic script to receive input from sensors following pledge algorithmm to navigate an arbitrary physical maze

### BattleShip Game

 Recreated BattleShip in Java complete with scalable textures, a resizeable game board and a computer player component

## Achievements

- 1st Place A.Y Jackson Programming Contest
- Semi-Finalist Educational Computing Organization of Ontario Competition
- Toshiba Exploravision Honourable Mention