# <u>David</u>Cheung

http://davidcheung.tk

#### contact

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# programming

JavaScript, Java, PHP, SQL, ASP.NET MVC 5, C++, C, Scheme/Racket CSS, HTML5

## frameworks + tools

NodeJS, ReactJS, AngularJS, Android, MongoDB, Hadoop, LibGDX, SFML, Box2D, Git, Bash, Google Maps API

# links

github.com/cheung-david linkedin.com/in/cheungdavid1 DCGooglePlay.tk

# interests

Algorithms, Games, Powerlifting, Dancing, Making Apps, Climbing Product Design

## activities

UW Computer Science Club

# **Education**

2014-Present University of Waterloo, Bachelor of Computer Science - 2B

# **Experience**

Jan-May 2016

#### Software Developer | BlackBerry

Identity Management Team

- Data analysis, architect/implemented the entire back-end of a user authenticated search engine that queried over 100 million rows, set up a web server and deployed it to production.
- Performed database and query optimizations on SQL Server
- Implemented user metrics to improve internal security
- Developed Angular Directives that utilized REST APIs
- Revamped the Web IT Portal. Redesigned core aspects of the site and implemented features such as real time search and notifications

May-Aug 2015

#### Web Developer | Middlefield Capital

Information Technology Team

- Developed and implemented UI design layouts on a comparison site
- Produced UX related requirements and translated them into visual concepts
- Designed and created prototypes for web pages and data forms executables

# **Projects**

August 2015

#### Elemental Jumper Game | Android | LibGDX

-> Present

• Developed an open-sourced infinite jumper Android game

· Coded in Java with LibGDX as the API

March 2016 -> Present

#### MeetUp | Web App | PHP | JavaScript

- Real time geolocation and chat room for a group of users, users can create a custom room for members to join.
- Direction routing for the main user
- Implemented in JavaScript, PHP, MySQL, BootStrap, HTML5 and utilizes Google Maps API

March 2016 -> Present

### Post It | Web App | NodeJS | MongoDB

- Developed a photography site that allows registered users to
- share/edit photos with descriptions and comment on them

  Authenticated with Passport and follows RESTful routing conventions
- Implemented with the MEAN stack

Dec 2015

## Chess | C++

- Co-developed a chess game that has four levels of heuristic AI, undoing moves, loading saved games and custom board setup
- Hardest Al implemented in Negamax with alpha beta pruning
- Drafted and maintained through UML diagrams and GitLab

July 2015

## Maze Game | C++ | SFML 2.3

- Developed an open-sourced maze game using the SFML API.
- Maze generated using a randomized depth-first search recursive backtrack algorithm
- Path finder is implemented using breadth first search on a grid based map system