

# Richard Dang

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IB Computer Engineering  
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## Skills Summary

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- Proficient in object-oriented design with over two years of experience in *Java*
- Familiar in front-end web development with *HTML*, *CSS*, *JavaScript*, and *jQuery* through online courses
- Currently learning full stack technologies including *Gulp.js*, *Browserify*, *Apache*, *MySQL*, *PHP*, *MVC Frameworks*, *Node.js*, *AngularJS*, *Express.js*, *Ruby on Rails*, and *ASP.NET*
- Self-taught experience with *Android Studio*, *C*, *C++*, *Python* and version control with *Git* and *SVN*
- Highly adaptable and enthusiastic individual as demonstrated by keen interest to learn new technologies
- Strong analytical and problem solving skills developed through designing and debugging personal projects
- Excels in independent and cooperative work environments with experience in multi-site workplaces

## Work Experience

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**Software Tester and Tools Developer**, *GEO Semiconductor Inc.* Jan. 2016 – Apr. 2016

- Validated overall firmware integrity of over 20 camera sensors/platforms through *TestLink* and *JIRA*
- Reduced testing time by over 50% through automation of testing procedures using host communication APIs
- Developed host tools in *C* and *Python* for internal testing and development with use of *SVN* and *Crucible*
- Designed regression test plans used to verify proper functionality of Image Signal Processing and Geometric Processing algorithms

## Projects

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**Step Tracker**, *Pedometer & Compass Android App* May. 2016 – Jul. 2016

- Developed an *Android* application that utilizes sensors and finite state machines to track steps
- Implemented direction detection and location tracking using a map with predefined walls

**Intelligent Car**, *Autonomous Maze Solving Robot* Feb. 2015 – Jun. 2015

- Designed self-navigating vehicle programmed using *Arduino* with the ability to traverse a maze
- Experience with electrical components such as H-Bridges, light dependent resistors and motors/gears

**Tetris**, *Chemistry Educational Software* Jan. 2014 – Jun. 2014

- Programmed Tetris-like chemistry education game using *Java Swing* with implementation of *OOP* concepts
- Learned importance of system structures in software design while working with *UML* class/activity diagrams

## Extracurriculars & Interests

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**Driftwood Community Center** Jun. 2013 – Sept. 2015

- Enhanced communication and leadership skills as a result of mentoring younger students and planning events

**Interests** – Android smartphones, reading, road cycling, weightlifting, tennis and ping pong

## Education

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**University of Waterloo**, *Waterloo ON* 2015 – Present

- Candidate for Bachelor of Applied Science Degree in Computer Engineering