

# Richard Dang

IB Computer Engineering | r22dang@uwaterloo.ca | (647) 717-0339 | Toronto, ON, Canada  
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## Summary of Qualifications

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- Proficient in Java, C++, HTML and CSS
- Familiar with C, Python, JavaScript, JQuery, Turing and SQL
- Experience using Git, SVN, JIRA, Crucible, TestLink, Sublime Text, Arduino, SketchUp and batch files
- Highly adaptable and enthusiastic learner continually striving to improve personally and professionally
- 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 involving I2C, UART and SPI communication protocols
- Designed regression test plans used to verify proper functionality of Image Signal Processing and Geometric Processing algorithms such as Auto Exposure, Auto White Balance, Image Warping and On Screen Display
- Developed and maintained host tools in C and Python used for internal testing and development
- Reduced testing time by over 50% through automation of testing procedures using host communication APIs
- Analyzed HDMI and NTSC video sync timing using oscilloscope to meet customer boot-up time requirements

### Technology Website Editor, IGXPro.com Dec. 2011 – Aug. 2012

- Conducted in-depth research on latest electronics in order to author reviews and publish technology articles
- Enhanced written communication skills and expanded on existing knowledge of electronic devices

## Projects

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### RichardDang.ca, Personal Website Feb. 2016 – Mar. 2016

- Acquired fundamental web design skills through learning HTML, CSS, JS and JQuery without use of external frameworks; provides brief autobiography and showcases relevant projects and skills

### Intelligent Car, High School Computer Engineering Project Feb. 2015 – Jun. 2015

- Designed and created a self-navigating vehicle in team of three with the ability to traverse a maze using Arduino and electrical components such as H-Bridge, light dependent resistors and motors/gears

### Tetrisry, High School Computer Science Project Jan. 2014 – Jun. 2014

- Planned and programmed a chemistry education game in Java through implementation of OOP concepts
- Learned importance of system structures in software design while working with UML class/activity diagrams

## Education

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

- Candidate for Bachelor of Applied Science Degree in Computer Engineering (Co-op)

### William Lyon Mackenzie, Toronto ON 2011 – 2015

- Specialized program with deeper focus on math, science and computers; completed with 94% average

## Volunteer Experience

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### Driftwood Community Center

Jun. 2013 – Sept. 2015

- Mentored younger students in math and science; planned annual picnic trips and events

### Toronto Public Library

Jul. 2013 – Aug. 2014

- Oversaw arts, crafts and reading program for young children; organized book returns as librarian assistant

## Certifications

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| • FIT Software Design and Development & Business and Information Analysis | 2015 |
| • Cisco IT Essentials Certified                                           | 2015 |
| • WHIMIS & Occupational Illness Certified                                 | 2014 |

## Activities & Interests

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### Android Software

- Passionate about learning new consumer technology and self-taught knowledge about rooting and modifying software on Android smartphones and tablets

### Road Bicycling & Weightlifting

- Constantly improving average speed and total distance, exceeding 100km through continuous practice
- Committed to maintaining health and staying in active physical shape through consistent gym attendance