

# Danliang Wang

<http://www.danliang.tk>

Expected Graduation : Aug 2019

Email : [d267wang@uwaterloo.ca](mailto:d267wang@uwaterloo.ca)

Mobile : +1-780-863-6788

Availability : 8 months required

## PROGRAMMING SKILLS

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- **Languages:** Java, C, C++, Python, SQL, Bash, Javascript, MIPS Assembly
- **Technologies:** Android, AugularJS, Git, Perforce, Agile, GDB, FPGA, CNN, Unit/Regression Test
- **Interests:** Software Engineering, Infrastructure, DevOps, Capital Markets

## EDUCATION

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- **University of Waterloo** Waterloo, ON  
*Candidate for Bachelor of Computer Science, Honours, Business Option; GPA: 4.00* *Sep 2015 – Ongoing*

## EXPERIENCE

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- **Intel Corporation** Toronto, ON  
*Software Engineering Intern* *Jan 2018 - Apr 2018*
  - Implemented multiple compiler optimization passes that accelerate CNN workloads for image recognition: Average Pool Pass, Last Convolution Padding Pass, etc., for Intel Deep Learning Accelerator(DLA) Compiler
  - Created Global Average Pool Pass that enabled support for ResNet-101 network with very large input dimensions
  - Improved coverage of various concat topologies with Cascade Concat Pass and Multiple Concat Users Pass
  - Created Convolution Multi-buffer Output Pass which enabled the DLA compiler to support the latest Intel's Deep Learning Inference Engine features
  - Developed multiple Python scripts to automate routine tasks
  - Created unit tests for multiple compiler passes by defining new network topologies using protocol buffer
  - Used: C++, CNN, Python, Perforce, FPGA, Caffe, Protocol Buffers
- **BlackBerry** Mississauga, ON  
*Software Development Student* *May 2017 - Aug 2017*
  - Prototyped and developed cloud backup and restore feature for BlackBerry Password Keeper
  - Developed background events tracking feature for BlackBerry DTEK
  - Integrated AMap API into BlackBerry DTEK to support the event location tracking feature in China
  - Developed save, quick settings, edit, RTL features for BlackBerry Notable
  - Fixed multiple tricky bugs for existing features in BlackBerry Android Apps
  - Used: Java, Git, Jira, SQLite, Drive API for Android, AMap API, Android Studio
- **SynMatrix360** Waterloo, ON  
*Software Consultant* *Feb 2018 - Mar 2018*
  - Developed Intelligent Tuning page for a cloud-based microwave filter design web app
  - Developed algorithms to automatically determine margins for return loss, insertion loss, group delay specifications to aid RF engineers meet thermal shift requirements
  - Used: AngularJS, BootStrap, C#, Highcharts, LESS

## PROJECTS

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- **Lunar Lander:**
  - A game in which a player attempts to land a lunar landing module safely on the Moon
  - Enabled users to edit terrain with direct manipulation and the ability to undo/redo edits
  - Used: Java, Swing, Direct Manipulation, Undoable Edits, MVC
- **Simple Drawing:**
  - A drawing application that supports drawing and manipulating strokes
  - Enabled users to scale, rotate, duplicate, delete strokes as well as make color and line thickness changes
  - Used: Java, Swing, Hit-testing, MVC