# Philip (Weiyuan) Bao

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### SKILLS

- Programming: C, C++, Java, Python, Matlab, SQL, MongoDB, TCL, Bash, Assembly, System Verilog
- Web Development: HTML/CSS, AngularJS, Backbone.js, Node.js, jQuery, Bootstrap
- Tools: Android Studio, Microsoft Visual Studio, Bash, Vim. Git. PSpice

## **WORK EXPERIENCE**

#### IPD Engineer, PEY Intern

June 2016 – Expected Apr 2017

Intel, San Jose, CA, USA

- Emulated a 100G Ethernet IP design of Intel's new 14nm FPGA, Stratix 10.
- Designed a comprehensive multi-mode 100G multilane Ethernet design test platform which be able to generate and analyze millions of packets efficiently in System Verilog.
- Wrote Tcl and Bash script to automate synthesis flow and used by a team of 10 people.
- Wrote Bash script to automate and customize VCS simulation to help debug Ethernet design.

### **Mobile Application Developer, Coop**

May 2015 - Aug 2015

BlackBerry Inc., Ottawa, ON, Canada

- Developed an Android mobile search application with a team of 10 people which performs fast searches of 12 categories from databases containing over 100k items.
- Improved result rending performance, and optimized some categories' search performance by 30%.
- Participated in agile software develop process and used project tracking system like JIRA.
- Completed the work term with an outstanding evaluation.

### **PROJECTS**

#### **Course Recommendation System**

May 2016 - Now

- Developed an academic web platform with friends which used by 1000+ University of Toronto students to share reviews of courses, professors and exams, and to watch video tutorials online.
- Using MongoDB/Flask as backend, and Backbone.js/jQuery as frontend.

### 2D Robot User Interface Design

Dec 2015

- Designed a 2D robot user interface based on PlayerStage Platform(<a href="http://playerstage.sourceforge.net/">http://playerstage.sourceforge.net/</a>)
  with C++ to let the user easily control the robot to move along the path and avoid obstacles, etc.
- The robot is able to navigate itself based on real-time location data collected by sonar and laser.

#### Image Decompressor (https://github.com/bwwyyy/Digital-Systems-Design--2015/)

Nov 2015

- Designed a 4-stage robust '.mic8' image de-compressor in System Verilog verified by software model.
- Became comfortable designing and implementing multi-state digital systems.
- Completed the project with perfect score and excellent evaluation.

#### Personal Webpage (<a href="http://bwwyyy.github.io/philip-bao/">http://bwwyyy.github.io/philip-bao/</a>)

May 2015 - Now

- Designed and updated a personal webpage which hosted on Github Pages.
- Used JS for web interaction, and Bootstrap's CSS templates to improve the front-end interface.
- Gained experience in web designing and Git version control system.

#### EDUCATION

#### McMaster University, B.Eng Electrical and Computer Engineering (Co-op)

2013 - 2018(expected)

- 4.0/4.0 GPA
- Relative courses: Software Development, Algorithm & Data Structure, Digital System Design, Machine Learning

## **AWARDS**

Provost's Honour Roll Medal -Perfect 4.0 Sessional Average

2016

Kudsia Family Scholarship -Top of the Computer Engineering Program

2016