## Highlight of Skills

- Theoretical Computer Science Knowledge: Solid knowledge in algorithms and data structures; familiar with relational database; Also experienced in machine learning and big data analytic techniques
- Programming: Proficient in C/C++, SQL and Matlab; Also experienced in Java, Ruby and shell scripting
- Web Development: Hands on experience in web development with Ruby on Rails, HTML, CSS, Javascript; Also experienced in J2EE web with JSP, Servlet and JDBC; Skilled in both front-end and back-end development
- Development Tools: Proficient in MATLAB, Visual Studio and XCode; Skilled in Git/Github bash shell and VIM editor; Also experienced in Netbeans and Eclipse
- Teamwork: Experienced in diverse groups of people; Teamwork skills demonstrated in multiple projects

## Education

### University of Waterloo

Waterloo, Ontario

Master of Math in Computer Science (GPA: 92.3/100)

2014 - 2016

519-498-0365 (cell)

- Relevant courses: Artificial Intelligence, Advanced Algorithms, Big Data Quality, Requirements Engineering
- Full Tuition Scholarship recipient; International Student Entrance Award winner

### University of Science and Technology of China

China

Bachelor of Engineering in Electrical Engineering (GPA: 86.5/100)

2010 - 2014

- Relevant courses: Database, Object Oriented Software Design, Data Structures, Computer Network

## Experience

#### Full Stack Developer Intern

Kitchener, Ontario

ApplyBoard, a thriving startup incubated at Velocity

Jan 2016 - Present

- Suggesting, scoping, designing and implementing new software components for our platform (Demo here)
- Deployed on Amazon EC2, the ApplyBoard platform is based on Ruby on Rails framework, with back-end using MySQL and front-end using HTML, CSS and Javascript/JQuery
- Mainly developing on bash shell and VIM, cooperating with the dev team using Git/Github version control
- Newly implemented features are fully covered by well-written functional/integration tests for quality assurance; adopting Jenkins for continuous integration and Rollbar for agile error tracking
- Having 50K+ active users globally with 400K+ visits to date; there have been 200+ students successfully getting accepted to colleges/universities in Canada or the U.S. with the help of our web application

## Graduate Research Assistant

Waterloo, Ontario

University of Waterloo

May 2015 - Present

- Designed and implemented an innovative algorithm to solve de novo protein sequencing problem using c++
- Generated near-full length de novo protein sequencing at nearly perfect accuracy
- The methodology is a novel combination of a sophisticated protein scoring function and an amino acid based Hash table; tested on standard dataset, demonstrating superior performance compared with the state-of-the-art

#### Developer and Group Leader

Palo Alto, California

Global Design Innovation Workshop, Stanford University

Sep. 2013 - Jun. 2014

- Developed a smart charging system prototype for electric vehicles, sponsored by Electric Mobility Norway
- Implemented a station model using an Arduino microcontroller, an android smartphone application and a C program calculating the actual power distribution
- Applied the whole design innovation process and presented the project on Stanford Design experience Fair

## **Notable Projects**

# Ruby Gem Wrapper for International Telephone Input

Waterloo, Ontario

Open Source Contribution

Feb 2016 - Mar. 2016

- Identified and helped to fix critical bugs in International Telephone Input (jackocnr/intl-tel-input), a famous open source JQuery plugin with 1800+ stars on Github
- Wrapped the plugin as a Ruby Gem and published to RubyGems.org to facilitate the installation for Rails users

### Data Quality Assurance in Biological Database

Waterloo, Ontario

Advanced Topics in Databases (CS848)

Feb. 2015 - Apr. 2015

 Analyzed factors that cause data quality problem in biological database; designed and implemented a cleaning scheme by integrating the similarity of sequence and the semantic of the sequence description