

# Jaekyong Choi

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## EDUCATION

### UNIVERSITY OF WATERLOO

CANDIDATE FOR BACHELOR OF  
COMPUTER SCIENCE

Sept 2014 - present | Waterloo, ON

## SKILLS

### PROGRAMMING

Proficient:

C • C++ • Python • Java • JavaScript

Familiar:

C# • Android • HTML • CSS • Racket  
SQL • Assembly • Bash • UML •  $\text{\LaTeX}$

### DEVELOPMENT

Vim • VS 2008/2010/2013/Code

Eclipse • Sublime

### VERSION CONTROL

Mercurial • Git

### OS

Linux • Windows

### LANGUAGES

Native:

English • Korean

Limited Working Proficiency:

French • Mandarin Chinese

## COURSEWORK

- Data Structures and Data Management
- Foundations of Sequential Programs
- Computer Organization and Design
- Introduction to Combinatorics
- Logic and Computation
- Object-Oriented Software Development
- Designing Functional Programs
- Elementary Algorithm Design and Data Abstraction

## INTERESTS

Algorithms • Data Science  
Combinatorics • App Development  
Software Design • Entrepreneurship  
Music Production • Guitar • Fitness

## WORK EXPERIENCES

### IRDETO | SOFTWARE ENGINEER

Jan 2016 – Apr 2016 | Ottawa, ON

- Worked in an Agile Scrum environment with the Online Piracy Detection team
- Created an automated crawler and tracker in C++ that identifies files and user IP addresses on the eDonkey Network using the Windows API
- Wrote Python scripts that analyze millions of disorganized torrent data
- Developed an in-depth understanding of Hadoop and AWS

### IMAGINE COMMUNICATIONS | FULL STACK DEVELOPER

May 2015 – Aug 2015 | Waterloo, ON

- Created a web-based configuration application for a back-end service and implemented a diagnostic logging service using REST API, WebSocket and Angular directives
- Improved overall performance and usability of software through bug fixes, testing and implementation of new features using TypeScript, AngularJS, HTML5, CSS3/LESS, MYSQL and C#
- Suggested and integrated CefSharp into a C# program to embed Chromium within a WPF project

## PROJECTS

### MIPS ASSEMBLER

May 2016

- Wrote an assembler for MIPS assembly language in C++

### RAYTRACERS

Jan 2015 & Apr 2016

- Built a RayTracer in Python using Pygame module that loads and renders .obj files at SE Hack Day #14
- Followed up with an improved RayTracer that can save .bmp images in C++

### CHESS

Nov 2015

- Created a Chess game that supports four levels of heuristic AI, custom boards, saving & loading and score-keeping in C++
- Developed and maintained UML diagrams to organize the project structure

### AERIAL VIEW SHOOTING GAME

Nov 2014

- Developed an aim-and-shoot aerial view game in C# using Unity at Treetu's Hackathon

## HONORS & AWARDS

### PRESIDENT'S SCHOLARSHIP OF DISTINCTION

Sept 2014

Awarded to students with admission averages of 95+%

### THE JOHN MACPHERSON MEMORIAL SCHOLARSHIP

Sept 2014

Awarded to a student with excellent performance in mathematics and physics