# ZIHAO ZHANG

110 University Ave, Apt. 402 Waterloo, ON, N2L 3E2

2A Computer Science 20569929 zh6zhang@uwaterloo.ca (519) 722-9612 http://zihao.me

## **SUMMARY OF QUALIFICATIONS**

- Five years of experience in software development with multiple programming languages
- Expert knowledge of sophisticated algorithms and their applications
- Strong analytical and problem solving skills
- Self-motivated, enthusiastic and responsible worker
- Excellent verbal and written communication skills; fluent in Mandarin Chinese

#### **TECHNICAL SKILLS**

- Programming Languages: C/C++, Python, Java, Racket, Assembly, C#, JavaScript, SQL
- Software/Tools: Vim, Git, GDB, LaTeX, Sublime Text, Xcode, Visual Studio, IDA Pro
- Experienced with UNIX command line and scripting

### PROGRAMMING EXPERIENCE

- Projects (More on Github: github.com/zzh8829)
  - http://zihao.me
    - My personal home page built on top of Nginx, Node.js, NoSQL stack
  - o "PythonCraft"
    - 3D Minecraft Clone written primarily in Python with C++ rendering backend
  - o "Cubez"
    - Rubik's Cube simulator written in Java with OpenGL
  - Hoppy Operating System
    - 32 bit x86 OS with basic support for I/O, display, console and memory management

#### **AWARDS**

- International Olympiad in Informatics (IOI) Bronze Medal, IOI Scientific Committee, July 2014
  - o One of the most prestigious computer science competitions in the world
- Canadian Computing Olympiad (CCO) Gold Medal, CEMC, University of Waterloo, May 2014

#### **EDUCATION**

- Candidate for Bachelor of Computer Science, Honours Computer Science, University of Waterloo, Waterloo, ON, Sept. 2014 – present
- **Relevant Courses**: Object-Oriented Software Development, Designing Functional Programs, Elementary Algorithm Design and Data Abstraction
- Relevant Assignments: Implemented a tail-recursive continuation-passing Scheme interpreter
- Ontario Secondary School Diploma, Vincent Massey Secondary School, Windsor, ON, June 2014

## **ACTIVITIES & INTERESTS**

- Intramural Dodge Ball Team Member, University of Waterloo, ON (Jan. 2015 April 2015)
  - Winter 2015 Beginner Level Champion
- Vincent Massey Secondary School, ON
  - o FRC Robotics Team Member (Sept. 2013 June 2014)
    - Leader of the software development team
  - o Computer Science Club Member (Sept. 2011 June 2014)
    - Taught algorithms and data structures
  - Web Development Team Member (Sept. 2011 June 2014)
    - Developed and maintained school website
- Computer Security
  - o Reverse Engineering, Capture the Flag, Exploits Analysis
- Competitive Programming
  - o Participated in IOI, ACM, Codeforces, TopCoder, Google Code Jam, Facebook Hackercup
- Cycling, Running, Philosophy, Theoretical Physics