RYAN WONG

Software Engineering
University of Waterloo

CONTACT

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LANGUAGES

Java, C++, C, Python
Familiar with **HTML/CSS, Ruby,
C#, Perl, SQL, Javascript**

TOOLS

Frameworks: **Spring, Rails**
Version Control: **Git, SVN**
Testing: **JUnit, Robotium**
OS: **Windows, Linux, Mac**
Databases: **MySQL**
IDE/Editor: **Eclipse, Android
Studio, Netbeans, Vim**

AWARDS

ECOO 2015 Central Region
Programming Contest 2nd place

The Woodlands School 2014
Computer Science, Functions, and
English awards, for highest grade

American Mathematics
Competition (AMC) 2014 Honour
Roll, qualified for AIME

EXPERIENCE

Software Developer Intern   Jul. 2014-Aug. 2014

Alcatel-Lucent, Ottawa, ON

- Implemented XML over TCP/IP support for over 15 client/server models using C# and Perl
- Fixed message boundary errors in existing protocols by introducing length prefixes
- Designed sanity checks to prevent denial-of-service attacks

Full Stack Website Developer (Part-time)   Jan. 2014-Apr. 2014

SWS Engineering Inc., Mississauga, ON

- Increased client requests by 30% by designing an interactive website with responsive web design
- Built foundation of client login system using PHP and MySQL
- Added web forms with input validation for clients to submit inquiries

PROJECTS

AssignmentTracker Android App, Personal Project   Sept. 2015-Nov. 2015

- Notifies users of upcoming due dates and manages entries with an AVL tree
- Allows users to instant message over Wi-Fi and share assignment files
- Java, SQL, XML, JSON

ImageGrabber Android/Desktop Apps, Personal Project   May 2015-Jun. 2015

- Fetches images from Flickr and Booru imageboards and resizes bitmaps into a fluid, scrollable view
- Java, Ruby, Nokogiri, SQL, XML, JSON

MaplePlay Game Bot, Personal Project   Jun. 2013-Jun. 2014

- Built scripts to automatically fight monsters and gather items in the online game Maplestory
- Converts game maps to graphs and uses Dijkstra's algorithm to pick the fastest routes
- C++, Java, AutoIt

DoodleJump Clone, Group Project (University)   Sept. 2015-Nov. 2015

- Rewrote platforming game for the Tiva C Launchpad microcontroller kit
- Developed bitmap to byte array converter for graphics; rotations achieved via triple shear algorithm
- C, C#

EDUCATION

Candidate for Bachelor of Software Engineering,   Sept. 2015-Present
University of Waterloo

- Cumulative 4.0 GPA
- Relevant courses: Programming Principles, Methods of Software Engineering, Data Abstraction and Implementation, Calculus II

Ontario Secondary School Diploma, The Woodlands School, Mississauga, ON   Jun. 2015

SAT – 800 Reading, 790 Writing, 800 Math (2390 cumulative)   Dec. 2014

LEADERSHIP

The Woodlands School Music Activity Council President   Sept. 2014-Jun. 2015

- Coordinated school's most successful winter concert yet, with over 300 tickets sold

The Woodlands School Computer Science Club Executive   Sept. 2014-Jun. 2015

- Taught 40+ students data structures and sorting algorithms, and led school team at programming competitions