Ryan Wong

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Experience

Software Engineer Job-Shadow at Alcatel-Lucent, Ottawa, ON   August 2014

- Implemented XML over TCP/IP support in various client/server connections using C# and Perl
- Applied MVC architecture in development of blog application using Ruby On Rails and incorporated RESTful architecture using the Rails router

Website Developer at SWS Engineering Inc., Mississauga, ON   January 2014-April 2014

- Designed an interactive web page using HTML5 and CSS3, incorporating a responsive web design to ensure proper formatting on mobile devices
- Added web forms for clients to submit inquiries

Projects

AssignmentTracker Android Application, Personal Project   September 2015-November 2015

- Notifies users of upcoming due dates and automatically updates weekly assignments
- Checks for assignment overlaps and sorts entries using an AVL tree
- Allows users to communicate over Wi-Fi and share assignment files
- Java, SQL, XML, JSON

ImageGrabber Android and Desktop Applications, Personal Project   October 2015-November 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   June 2013-June 2014

- Built scripts to automatically 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, School Group Project (University of Waterloo)   September 2015-November 2015

- Rewrote platforming game for the Tiva C Launchpad microcontroller kit
- Developed bitmap to byte array converter to display graphics; supports resizing and rotations
- C, C++

Education

Candidate for Bachelor of Software Engineering,   September 2015-Present
University of Waterloo, Waterloo, ON

- Relevant courses: Programming Principles, Introduction to Methods of Software Engineering

Ontario Secondary School Diploma, The Woodlands School, Mississauga, ON   June 2015

- Relevant course: Computer Science

SAT – 800 Reading, 790 Writing, 800 Math (2390 cumulative, one sitting)   December 2014

Awards and Achievements

- ECOO Central Region Programming Contest 2nd place   2015
- The Woodlands School Computer Science, Functions, and English awards, for highest grade   2014
- AMC 12 Honour Roll, qualified for AIME   2014

Activities and Interests

The Woodlands School Computer Science Club Executive   September 2014-June 2015

- Taught general members implementations of basic data structures and sorting algorithms in Java
- Led school team at programming competitions

Interests: trombone, piano, badminton, online computer games with friends

Languages, Technologies, and Concepts

- Java, C++, C, Python, Ruby, HTML5, CSS3, XML
- Arrays, linked lists, binary search trees, graphs, hash tables, heaps, BFS, DFS, merge/quick/heapsort