MATTHEW YU

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TECHNICAL SUMMARY

Languages	C, C++, VBA, SQL, JavaScript, bash scripting, LaTeX, some C#
Platforms	Windows, OS X, UNIX command line
Tools	Crystal Reports, Oracle SQL Developer, Visual Studio + Team Foundation Server, Microsoft Access + Excel, UNIX command line and command-line tools
Workplace	Demonstrated adaptability, quick learning, critical thinking, and collaborative abilities

PROFESSIONAL EXPERIENCE

Application Developer
May 2014 – August 2014, January 2015 – April 2015

at Toronto Transit Commission, Toronto, Ontario

- Worked with the team's clients to determine functional requirements for new applications and change requests.
- Developed, documented, and implemented solutions using Access/Excel with VBA, C# ASP.NET, and Oracle databases to streamline the team's clients' workflows.
- Collaborated with team to mitigate and resolve mission-critical application issues to minimize downtime.
- Performed critical analysis and data cleansing on 19 years of historical records of 20,000 employees.

Quality Assurance Analyst
September 2013 – December 2013

at NexJ Systems Inc., Toronto, Ontario

- Created tool using Excel and VBA to analyze and prepare QA Department metrics for presentation in weekly executive team status updates.
- Collaborated with team to create a proposal to the company to implement a company-wide functional testing solution.
- Maintained automated functional testing scripts and executed manual test plans.

EDUCATION

Candidate for Bachelor of Computer Science
September 2012 – Present

Honours Computer Science, University of Waterloo, Waterloo, Ontario

Notable Courses

- **Object-Oriented Software Development** — studied regular expressions, bash scripting, design patterns, and object-oriented programming concepts in C++.
- **Algorithms** — studied algorithm design and paradigms (e.g., divide-and-conquer, dynamic programming), efficiency analysis, graphs, and various NP problems and reductions.
- **Introduction to Database Management** — studied E-R modelling, SQL, database design practices and schema normalization, and database efficiency.

Notable Projects

- **Quadris** — a Tetris clone developed in a 2-person team, employing an object-oriented modular design and adapting various design patterns. Implemented using C++ and X11 for graphical display.
- **runSuite** — a bash script to automatically execute test suites for command-line programs, including support for memory leak detection using **valgrind**.