

# Ryan Newman

University of Waterloo (2015 – 2020)

Computer Science, Software Engineering Option

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## SUMMARY OF QUALIFICATIONS

- Proficient in a wide range of programming languages including Java, Bash, C++, JavaScript, Python and Go
- Familiarity with multiple web frameworks like Spring, Node.js, AngularJS and ReactJS
- Experience with tools such as Git, SVN, Docker, Jenkins and Bamboo
- Excellent technical communication skills through active participation in team scrums and sprints
- Demonstrated practical problem solving skills through high rankings in multiple contests

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## EXPERIENCE

### MANULIFE FINANCIAL

Toronto, Ontario

#### Software Engineering Intern

January 2017 – April 2017

- Developed a Go web application that generated access reports by querying multiple API's, converted the data into a csv format and sent the report via email
- Wrote a Bosh release that deployed a Vulnerability Management Agent onto hundreds of Virtual Machines
- Wrote a Spring web application that allowed developers to check for connectivity from specific platform subnets to a designated host and port
- Created Bash automation to assist developers with the onboarding of their applications
- Worked with tools such as Pivotal Cloud Foundry, Concourse, Bosh and Microsoft Azure

### THOUGHTWIRE

Toronto, Ontario

#### Junior Automation Developer

May 2016 – August 2016

- Developed a Java command line tool that analyzes HTTP requests/responses in the form of .har files, runs the data against a predefined set of rules and reports violations
- Maintained and extended an automated test suite using Java, JUnit and Selenium
- Added multiple Java-based features to a platform test runner using ANTLR
- Wrote scripts in Bash and Python to run an installer against a specified set of target servers
- Performed functional and exploratory testing of an Android application including network connectivity problems

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## SIDE PROJECTS

### DOCUMENTED LEARNING

Java/Python/JavaScript

- A repository for detailing the results of my learning from self-directed studies and online classes
- Holds notes for essential Computer Science Concepts such as Docker, Vagrant and Git
- Implemented popular algorithms in the realms of graph theory, sorting and number theory
- Created multiple POC projects for systems and frameworks like MySQL and Socket.io

### PLAN

HTML/CSS/JavaScript

- Web App that allows users to register, add friends and send messages all through a secure REST API
- Application programmed with the use of the MEAN (MongoDB, Express, AngularJS and Node.js) stack
- Used numerous web technologies such as express for exposing API's, Sass for styling, Gulp as a task runner and Socket.io for real-time server-client communication
- End-to-end tested the website using Protractor and unit tested the server using Chai and Mocha

### CAVE FIGHTER

Java

- A Java based game in the style of Edmund McMillen's and Florian Himsl's, "The Binding of Isaac"
- Effectively developed using Object-Oriented Programming principles
- Utilized design patterns for increased readability and easy extension in the future

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## AWARDS

**GLOBAL SOLUTIONS DELIVERY:** The Top Contributor Award

Manulife Financial

**DEANS HONOUR LIST:** Achieved Over an 87% Term Average in Winter 2016

University of Waterloo

**CANADIAN COMPUTING COMPETITION:** Certificate of Distinction

University of Waterloo

**EUCLID MATH COMPETITION:** Certificate of Distinction

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