

Michael Rausch

A soon-to-be computer science graduate looking for a full-time graduate position as a software engineer.

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EDUCATION

University Of Canterbury — *B.Sc. Computer Science*

JUNE 2015 - JUNE 2018

Relevant Courses: Data and Network Security, Software Engineering (I, II and III), Internet Technology and Engineering, Relational Database Systems, Discrete Mathematics and Cryptography

University Of Canterbury — *Certificate In University Preparation*

JANUARY 2015 - JUNE 2015

SKILLS / EXPERIENCE

Software Development

- Built a Kickstarter-like crowdfunding website
 - Designed a relational database schema and implemented it in MySQL.
 - Built a RESTful web API using NodeJS and Sails.js.
 - Designed and built a modern web application using Angular 4, CSS3, and HTML5.
- Designed and built a personal website to showcase my resume and projects that I have worked on using HTML5, CSS3, and Angular 5.
- Built a web service to handle contact form submissions on my personal website using Kotlin and Spring Framework.
- Built a 3D sailing game as part of a whole-year group project.
 - Worked on a large, rapidly changing Java codebase.
 - Worked with 3D models using JavaFX's 3D libraries.
 - Worked on multi-player networking functionality, including automatic server discovery.

Linux Server Management

- Deployed web applications on servers running Debian and CentOS.
 - Configured NGiNX as a reverse proxy.
 - Configured SSL certificates for each domain.
- Hardened servers against security threats.
 - Used OpenVAS to detect potential security vulnerabilities. Modified configurations and updated software as necessary to resolve these vulnerabilities.
 - Configured firewall and set up security tools such as Tripwire.

Team Skills

- Worked in a team of eight people over the course of a year to build an America's Cup Visualizer, which then evolved into a fun multiplayer sailing game.
 - Embraced Agile software engineering practices.
 - Managed conflicts between team members, and provided help when needed.
 - Provided written feedback for other team members at the end of each sprint.

SKILLS

Proficient Using:

Java, C / C++, Python,
JavaScript, Git, MySQL

Familiar With:

Angular 2+, Swift, OpenGL,
Spring Framework

Experimented With:

PHP, Kotlin, Go, Dotnet Core

MEMBERSHIPS

Associate of the Institute of IT
professionals.

Network Programming

- Implemented the Americas Cup Streaming Data Interface to view a live race visualization from the 2016 Americas Cup. This protocol was later extended to add new functionality, such as real-time chat, and various game controls. This was done as a part of a team project.
- Implemented the RIPv2 routing protocol from the IETF Specification in Python. This was done as a pair assignment.

WORK

Linwood College — *Python Tutor*

AUGUST 2015 - DECEMBER 2015

Teaching senior high school students the basics of the Python programming language, and preparing them for NCEA assessments.