William **Findlay**

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EDUCATION

Bachelor of Computer Science *Carleton University*
September 2015 - April 2020 *Ottawa, ON*
Software Engineering Stream
CGPA: 11.0 (A)

WORK EXPERIENCE

Teaching Assistant (COMP3000 Operating Systems) *Carleton University*
September 2018 - Present *Ottawa, ON*

- Ran tutorial sessions for groups of 50 students.
- Took a leadership role to ensure tutorials proceeded smoothly.
- Held weekly office hours and workshops for students.
- Graded assignments and tests and gave appropriate feedback.
- Proctored exams for about 200 students.
- Assisted professor with development and delivery of course material.

Full Stack Developer *Hilltops Real Estate Group*
May 2018 - September 2018 *(Remotely) Dallas, TX*

- Developed website for a startup student housing company.
- Led a small team of developers working on full stack development of a business website.

Service Department Supervisor *Metro Ontario, Inc.*
April 2014 - January 2018 *Ottawa, ON*

- Managed day-to-day operations in the front end service department.
- In charge of store payroll and accounting on a part-time basis.
- Exhibited superior customer service skills as required.

PROJECTS (See more on GitHub)

Raspberry Pi GPIO Pin Driver
- Wrote a character device driver Linux kernel module to act as a driver for GPIO pins on the Raspberry Pi.
- Module supported read and write operations to set active pins, read pin input, and write pin output.
- A full writeup on the module is available at http://www.wfindlay.com/portfolio/written/3000report.pdf

Asciify (ASCII Art Generator)
- Wrote an ASCII art generator CLI in Python3.
- Generator takes an image or GIF as input and produces ASCII art output.
- Full support for color and black and white ASCII art.
- Full support for ASCII animated GIFs.

Genetic Algorithm for Text Generation
- Wrote a genetic algorithm in C++ to generate a human-readable string from random data.

Taskmaster
- Wrote GUI workflow management tool in Qt5 and C++.
- Application keeps track of current tasks, upcoming tasks, and breaks and cycles through them with a timer.

LANGUAGES

Programming
10,000 or more lines
C, C++, Python, R

5,000 - 10,000 lines
Java, Javascript, Lisp

1,000 - 5,000 lines
Haskell, Prolog, Vimscript, x86-64 Intel Assembly

Markup
Markdown, Rmarkdown, LaTeX, HTML, CSS

Human
English, French

TECHNOLOGIES

Qt, NodeJS, Tensorflow, ReactJS, Git, Bash

WORKFLOW

Operating System
GNU/Linux (Arch Linux)

Window Manager
i3wm

Terminal and Shell
Termite, Bash

Text Editor
Vim

Version Control
Git, GitHub

TECHNICAL SKILLS

GNU/Linux kernel development
Low-level C development
C++ development
Python scripting
Statistical analysis in R
Documentation in LaTeX and Rmarkdown

GENERAL SKILLS

Team leader
Dedicated
Goal-oriented

EXTRACURRICULAR

Linux nerd and free software enthusiast
Computer builder
Study group leader for friends and peers
Former Grandmaster Starcraft II player