

Russell Gill

Versatile **junior software developer** with scientific background looking for full-time opportunities, or contract work in the technology sector

SKILLS

TECHNICAL SKILLS: Programming, Software Development, Statistics, Mathematics, Data Analytics & Mining, Machine Learning, Web Scraping, SQL and Database Management, Data Structures & Algorithms, Computer Science, Version Control

SOFT SKILLS: Interpersonal Communication, Teamwork, Technical Writing, Presentations, Analytical Reasoning, Critical Thinking

RECENT EXPERIENCE

Canadian Senate, Ottawa — Full-Stack Web Developer

March 2020 - June 2020 (Contract)

Developed website and provided server configuration to a member of the Senate. Responsibilities included:

- Selecting site framework and configuring web server.
- Extending framework functionalities with **Javascript ES6** and **Gulp** build system.
- Configuring **Node.JS** backend, as well as **Nginx** server settings.

Statistics Canada, Ottawa — Developer/Analyst

January 2019 - PRESENT

Currently working as an analyst and **Python** developer. Primarily, my contributions have been to an open-source data-science software framework, as well as to our existing **DevOps** tools. Some of the contributions have included:

- Developed module in **Python** to extend existing framework by allowing advanced data generation.
- Creating machine learning prototypes with **Tensorflow** and **Keras**.
- Improved on existing cloud deployment tools by developing customizing **Ansible** scripts and writing CLI tools for virtual machine deployment.

SmartMoms Canada, Ottawa — Systems Administrator

February 2019 - December 2019 (Contract)

Administered a **CentOS Linux** server. Some of my responsibilities included:

- Improving system security using **Fails2Ban** and **Nginx** configurations.
- Trouble-shooting and configuring **Gradle** projects for testing
- Maintaining and configuring **SQL** databases.

Town Lab, Ottawa — Python Developer

January 2019 - September 2019 (Contract)

Developed software and configured operating system of Raspberry Pi computer. Work performed involved:

- **Python** software with **Tkinter** interface allowing data collection from custom hardware.
- Interacting with hardware engineers and designers to understand software requirements.
- Writing analysis toolkit in **Python** with **Tkinter** interface.
- Providing user-training for delivered software to other team members.

Phone: -----

Email: -----

Github: russellgill.github.io/hello

LANGUAGES (Human)

- o English
- o French

LANGUAGES (Computer)

- o Python 3/2.7
- o JavaScript ES6
- o Golang
- o Java
- o SQL
- o C#
- o C
- o R

TOOLS

Data Science: Pandas, Numpy, Apache Arrow, Jupyter Notebooks, Dask

Machine Learning: Tensorflow via Keras, SKLearn

Development: Gradle, Git, Gulp

Web: Node.js, React.js, Flask, Golang Net/HTTP, Nginx, Apache Server, MEAN Web-Stack, Web-Assembly (WASM)

Databases: NoSQL (MongoDB, CouchDB), SQL (MySQL, PostgreSQL)

DevOps: Azure Cloud, Google Cloud, Digital Ocean

Automation: Selenium, Ansible, Chron

University of Ottawa, Ottawa — *Research Assistant*

January 2018 - September 2019

Assisted in research tasks for a number of internal research groups.

- Developed machine learning code in **Python**.
- Collected and analyzed data.
- Developed reports and explained results.
- Assisted in writing grant proposals and edited drafts of documents.
- Carried out **statistical analysis** on data to understand results.

EDUCATION

University of Ottawa, Ottawa — *Bachelor of Science*

Anticipated Graduation: June 2020

Anticipate receiving a BSc with coursework focused on **scientific computing**, **programming**, **informatics**, **chemistry** and **physics**.

Extra Curriculars:

- UOttawa Foot Patrol - Walker
- CCUWIP 2019 - Photographer
- Physics Society UOttawa - VP Academic (2019), Secretary and Webmaster (2018)

PROJECTS

Parkinson's Detection with Machine Learning - Python 3.7

XInput Keyboard Mapper - C# via Microsoft .NET Core

Digital Ocean Cloud CLI - Java and Gradle

For details about these projects, as well as a few others, visit my Github Link on the first page. This links to a directory containing source-code and descriptions.

PUBLICATION

¹³C and ¹⁹F Solid-State NMR and X-Ray Crystallographic Study of Halogen-Bonded Frameworks Featuring Nitrogen-Containing Heterocycles
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