Liam Rosborough

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Summary of Qualifications

- Strong geospatial and analytical skills developed through diverse projects at work and school. Passion for GIS.
- Excellent communication and customer service experience in both English and French.
- Honest and teachable teammate with a strong work ethic, and desire to continue learning.

Experience

TEACHING ASSISTANT | MCGILL UNIVERSITY | SEPT 2023 – PRESENT (CONTRACT)

- Assisted with the instruction of GEOG308 – remote sensing for earth observation, as well as GEOG314 – geospatial analysis. Taught and answered questions about the use of various analytical tools across Google Earth Engine, ArcGIS Pro, and ENVI software.

GIS RESEARCHER | FAMILY SERVICES WINDSOR-ESSEX – ADU SEARCH | AUG 2022 - JULY 2023 (CONTRACT)

- Analyzed housing policy centered on accessory dwelling units (ADUs) for municipalities across Canada. Created Python scripts and ModelBuilder workflows to translate housing policy into buildable ADU area for eligible parcels within municipalities of interest. Worked in ArcGIS Pro, and R Studio to calculate and visualize results.

LAND SURVEYING ASSISTANT | J.D. BARNES LIMITED | MAY 2022 – AUG 2022 (CONTRACT)

- Operated total stations, automatic levels, and global navigation satellite systems to gather spatial data in the field. Assisted with survey notes, calculations, and problem-solving surrounding complications on job sites. Worked on housing, boundary, and topographic surveys in varying conditions.

GIS CONSULTANT | D.M. WILLS ASSOCIATES | JAN 2022 – APR 2022 (CONTRACT)

- Assisted with the standardization of a process for the creation of parcel data in Eastern Ontario. Provided decision making support and model builder workflows for the geospatial aspects of flood risk mapping projects.

TEACHING ASSISTANT | UNIVERSITY OF WATERLOO | SEP 2021 – DEC 2021 (CONTRACT)

- Instructed a class of fifty first year geomatics students on geospatial technologies and methods. Provided assistance with lab work in ArcGIS Pro, QGIS, Tableau, and Microsoft Excel. Improved on public speaking, and confidence with geospatial topics through teaching.

DISTRIBUTION AND GEOSAPTIAL INTELLIGENCE ANALYST | TD BANK | MAY 2021 – AUG 2021 (CO-OP)

- Analyzed TD Bank's physical branch network to determine areas of high or low traffic using various spatial and aspatial datasets. Used a variety of geospatial analyses and data science techniques to build cases for the opening, closing, or moving of branches. Gained experience leading projects and presenting my findings.

GEOSPATIAL OFFICER | ENVIRONMENT & CLIMATE CHANGE CANADA | MAY 2020 – DEC 2020 (CO-OP)

- Provided geospatial support in the form of mapping products, analysis, and presentations for the Great Lakes Baseline Habitat Survey. Developed and conducted an effective mesh size analysis for the Lake Ontario basin, as well as a shoreline hardening analysis of the Lake Ontario shoreline.

TECHNICAL TRAINEE - GIS | CITY OF TORONTO | JAN 2019 – APR 2019 (CO-OP)

- Utilized the ArcGIS suite, SQL queries, and Python scripting to plan millions of dollars worth of road resurfacings and reconstructions in the City of Toronto based on geographic area, pavement quality, and cost. With the analyzed data, I created maps and presented my analyses to Transportation Services.

Skills & Abilities

GEOMATICS

- **GIS** – Strong proficiency with ESRI ArcGIS products. Experienced in performing spatial analyses, digitizing, creating maps, and querying data in ArcGIS Pro. Proficient in the creation of online GIS experiences through ArcGIS Online, and Experience Builder. Strong knowledge of open-source GIS options such as QGIS and PostGIS.
- **Remote Sensing** - Extensive experience working in PCI Geomatica, ENVI, and Google Earth Engine for environmental projects. Strong foundation in remote sensing theory.
- **Land Surveying** – Experience performing distance and angle measurements, leveling, traversing, and topographic surveying using a level, total station, and GPS.
- **RPAS** - Comfortable creating flight plans and operating remotely piloted aircraft systems (RPAS) for data collection.

COMPUTING

- **Software** – Very knowledgeable of the Microsoft Office suite of products. Experienced using Alteryx for data manipulation, creating workflows, and analytics.
- **Coding** - Familiar coding in Python, R, HTML, CSS, JavaScript, and Bash to develop tools and automate processes. Comfortable providing solutions involving both spatial and aspatial data.
- **RDBMS -** Significant experience working with relational database management software such as Microsoft SQL Server and PostgreSQL.
- **Web Development** - Passion for web development and website design, particularly web mapping using technologies such as Leaflet and MapBox in JavaScript.
- **Data Mining** – Comfortable applying data mining concepts and techniques such as association rule mining and classification analysis to both spatial and aspatial data sets. Experience in data mining with R, Python, and RapidMiner.

SOFT SKILLS

- **Communication** - Strong presentation skills, gained through various presentations at TD Bank, ECCC, and capstone courses at school. Confident in taking low-level technical information and presenting it at a higher level for wider audiences through written and oral communications.
- **Languages** - Love for learning about new languages and have been a French student for eighteen years. Work experience providing technical translation services from English to French and vice versa.

Education

M.SC. GEOGRAPHY | MCGILL UNIVERSITY | SEPT 2023 – PRESENT

- Coursework in Data Mining, Advanced GIScience, Geospatial Web Development, and Climate Change.
- Research focused on Spatial Agent Based Modelling, Web Mapping, and GIS-Enabled Historiography.

HONOURS B.E.S GEOMATICS | UNIVERSITY OF WATERLOO | SEPT 2017 – APR 2022

- Achieved a minor in Computer Science, as well as the French Language II Diploma.
- Completed coursework in GIS, Spatial Analysis, Remote Sensing, Computer Science, and Land Surveying.

Certifications and Interests

- Transport Canada Basic Operations RPAS Certificate, Advanced Operations RPAS Examination.
- Full, unrestricted driver's license.
- I enjoy film, camping, hockey, rugby, volleyball, golf, reading, and card games.