

# Keenan Nicholson

Data Analyst & Software Developer

✉ [keenanbnicholson@gmail.com](mailto:keenanbnicholson@gmail.com)

🐙 [github.com/Keenan-Nicholson](https://github.com/Keenan-Nicholson)

in [linkedin.com/in/kbnicholson/](https://www.linkedin.com/in/kbnicholson/)

## Professional Experience

### Natural Resources Canada

Nov 2024 – May 2025

Geospatial Research Assistant

Corner Brook, NL

- Built and optimized scripts and pipelines using **Python**, **R**, and **MATLAB** to extract meaningful insights from large and complex datasets used in land cover classification, forest health assessment, and environmental monitoring.
- Managed end-to-end data pipelines, handling everything from raw data ingestion to processing, analysis, and delivery of production-ready outputs.
- Automated workflows and statistical analyses to improve efficiency and reproducibility.
- Supported ecological and forest management research by developing tools and workflows for analyzing advanced remote sensing data, including LiDAR and hyperspectral imagery.
- Contributed to applied research projects that shaped strategies and informed environmental policy at the regional and national levels.

### Resource Innovations

Jan 2024 – Oct 2024

Software Developer

Corner Brook, NL

- Processed and analyzed large-scale datasets for environmental and geospatial research using **R** and **Python** in a cloud computing environment (**Amazon Web Services**).
- Researched methods to analyze LiDAR data for extracting forest metrics.
- Planned and supported UAV-based LiDAR surveys to collect high-resolution data for large-scale forest analysis using **ArcGIS Pro**, **QGIS**, and **Cloud Compare**.

### C-CORE

Apr 2023 – Sep 2023

Image Analyst

St. John's, NL

- Used an **ESRI** suite of tools to analyze satellite imagery to track iceberg activity for the tourism and oil industries.
- Generated clear insights that helped clients make informed decisions using **Python** and visualization libraries, **Seaborn** and **Matplotlib**.
- Built interactive dashboards and analytical tools using **React**, **TypeScript**, and **Material UI**.
- Created APIs and backend logic with **Python** and **FastAPI** to serve analytical results.

## Education

### Bachelor of Arts

Major in Computer Science, minor in Geography

Memorial University of Newfoundland

Jan 2021 – Dec 2023

### Bachelor of Science

Major in Computational Mathematics

Memorial University of Newfoundland

Sep 2016 – Apr 2020

## Technical Skills

### Languages and Frameworks

### Data Analysis Tools and Libraries

### Databases

### Other

Python, R, MATLAB, JavaScript/TypeScript

Pandas, PyTorch, Seaborn, Matplotlib, scikit-learn, Excel

MySQL, PostgreSQL, SQLite

ESRI, QGIS, Linux, macOS, Windows, Git, Cloud Computing (AWS), REST APIs