

Keenan Nicholson

Data Analyst & Software Developer

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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

Relevant Experience

Natural Resources Canada

Geospatial Research Assistant

Nov 2024 – Present

Corner Brook, NL

- Automated workflows and statistical analyses using **Python**, **R**, and **MATLAB**, 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.
- Built and optimized scripts and pipelines 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.
- Contributed to applied research projects that shaped strategies and informed environmental policy at the regional and national levels.

Resource Innovations

Software Developer

Jan 2024 – Oct 2024

Corner Brook, NL

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

C-CORE

Image Analyst

Apr 2023 – Sep 2023

St. John's, NL

- Used **Python** and visualization libraries, **Seaborn** and **Matplotlib** to turn environmental data into clear insights that helped clients make informed decisions.
- 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.
- Integrated complex data pipelines into user-facing applications, facilitating real-time insights for clients.

Technical skills

Languages and Frameworks

Data Analysis Tools and Libraries

Databases

Other

Python, MATLAB, R, JavaScript/TypeScript

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

PostgreSQL, SQLite (SQL)

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