Keenan Nicholson

Software Developer & GIS Analyst

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Education

Bachelor of Arts *Memorial University of Newfoundland*
Major in Computer Science, minor in Geography *Jan 2021 – Dec 2023*

Bachelor of Science *Memorial University of Newfoundland*
Major in Computational Mathematics *Sep 2016 – Apr 2020*

Work Experience (selected)

Resource Innovations *Jan 2024 – Oct 2024*
Software Developer *Corner Brook, NL*

- Data driven development of tools and services to help streamline and improve quality of life for clients.
- Research and development of algorithms and machine learning tools to aid in resource management.
- Collection, processing, and analysis of LiDAR and imagery data via Unmanned Aerial Vehicles (UAV).

C-CORE *Apr 2023 – Sep 2023*
Image Analyst *St. John's, NL*

- Analyzing satellite imagery using technologies such as ArcGIS Pro, Python, Pandas, and Matplotlib to monitor iceberg and river ice activity.
- Data driven full-stack development of web applications
  - Frontend: React.js, HTML, CSS, Material UI (MUI), and Chakra UI.
  - Backend: Python, Pandas, SpatioTemporal Asset Catalogs (STAC).

Projects

MoodMap *September 2024*
Personal Project

An application allowing users to upload "mood ratings" tied to their geographic location. These ratings are visualized on a map, where a heatmap or color-coded point markers appear depending on the zoom level. When clicked, each marker displays the mood rating and a user-provided text description of the area's "mood". https://github.com/Keenan-Nicholson/Mood-Map.

- Frontend: React.js, HTML, CSS, MapLibre GL.
- Backend: Express.js, Tanstack Query, Postgres.

Blog *Dec 2023*
Personal Project

A multi-user blog platform where one can create, and edit their own posts, or browse posts by users. https://github.com/Keenan-Nicholson/blog-app.

- Frontend: React.js, HTML, CSS.
- Backend: Express.js, Tanstack Query, Postgres.

Technical skills

Programming Languages	JavaScript/TypeScript, Python, HTML, CSS
GIS	ArcGIS Pro, QGIS, Pandas/GeoPandas, LiDAR data collection
Frameworks	React.js, Chakra UI, Material UI