

Adam Nearing

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EDUCATION

The Centre of Geographic Sciences (COGS) - NSCC, Lawrencetown NS Sept 2025 - Present

Geographic Information Systems (GIS)
Advanced Graduate Certificate

Nova Scotia Community College, Halifax NS Jan. 2023 - Dec. 2024

Information Technology
Diploma (Cooperative Education)

Nova Scotia College of Art and Design University, Halifax NS Sept. 2015 - Apr. 2019

Major in Film Studies & Art History
Bachelor of Fine Arts (Honours)

PROFESSIONAL EXPERIENCE

Capstone Project NSCC, Halifax NS Sept. - Dec. 2024

Project Manager & Creator (ParkBuddy App)

- Managed the end-to-end project lifecycle, overseeing comprehensive research, database schema design, and successful full-stack application implementation.
- Implemented the internal database structures to support complex application logic and facilitate seamless user data system integration
- Directed front-end design approvals and technical workflows to ensure the final product aligned with established project goals and design specifications.

Chebucto Community Net Society, Halifax NS May – June 2024

Project Manager & Backend Developer

- Architected back-end functionalities to enable user-driven internet plan customization and streamlined data management operations.
- Led a development team by establishing weekly project roadmaps and mentoring junior developers in modern front-end development best practices.
- Facilitated technical code reviews and provided architectural guidance to ensure high-quality code standards and optimized system logic.

Little Symphony Inc., Halifax NS May – Aug. 2023

Web Development Intern (Co-Op)

- Developed full-stack solutions through self-directed technical research, focusing on scalable front-end and back-end logic for enhanced system performance.
- Presented comprehensive project scopes to stakeholders, translating technical milestones into clear business value and strategic project goals.
- Optimized project workflows to meet rigorous development deadlines and technical requirements for successful project delivery.

PROJECTS

Point Classification: LiDAR Terrain Modelling Jan. 2026

- Processed high-density LiDAR datasets within a MicroStation and TerraSolid (TerraScan) environment, utilizing a block-based partitioning strategy to manage system memory and perform precise point classification for terrain modelling.

Youwind Renewable Energy Site Analysis Nov. 2025

- Modelled optimized offshore wind farm layouts off the Nova Scotia coast using the Youwind platform, utilizing wake-optimized turbine positioning and custom polygon boundary analysis to model the spatial relationship between array density and wake losses.

Wind Turbine Data Analysis Nov. 2025

- Developed an ETL pipeline in R using Tidyverse and GGally to analyze Nova Scotian turbine specs, applying Spearman correlation and matrix reporting to model relationships between rated capacity and physical dimensions.

Spatial Forestry Database Design & Querying Nov. 2025

- Architected a PostgreSQL/PostGIS spatial database for forestry management, authoring DDL scripts to automate schema creation and utilizing spatial functions (ST_Crosses, ST_Within) to perform proximity analysis and topological overlays for management reporting.

COMMUNITY INVOLVEMENT

GIS Ambassador | Esri Canada Dec. 2025 – Present

- Promoting geospatial literacy by leading interactive demonstrations for students, utilizing National Geographic MapMaker to visualize complex environmental data and light pollution correlations.
- Developed an "Applied Problem Solving" curriculum, guiding students through 3D terrain analysis and elevation profiling to simulate civil engineering route optimization in rugged environments.

Future Strategy Committee Member | GANS Dec. 2025 – Present

- Collaborating with industry leaders to modernize the Geomatics Association of Nova Scotia's mandate, focusing on sustainable governance and the evolving requirements of the provincial geospatial ecosystem.
- Advocating for early-career professionals by identifying mentorship gaps and recommending strategic partnerships to increase membership value within government, industry, and academia.

SKILLS

Geospatial: ArcGIS Pro, QGIS, TerraScan, Youwind, MicroStation, Global Mapper

Remote Sensing: LiDAR Point Cloud Classification, 3D Terrain Modelling, Land Usage Analysis

Data Science: RStudio, Python, ETL Processes, Statistical Modelling

Database Management: PostgreSQL, PostGIS, Oracle, SQL Scripting, Schema Design

Web Development: Leaflet, JavaScript, React, HTML5/CSS, Full-Stack Logic, API Integration

Strategic Leadership: Project Management, Technical Writing, Case Studies, Team Leadership