

# Adam Isaak

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Dedicated physical geography undergraduate specialized in glaciology and geomorphology, adept at using technical skills and writing to efficiently complete tasks. Proficient at applying a strong background of computer skills to GIS workflows using spatial data in a geomorphology focus. Strong communication skills focused on resolving issues and solving problems. Eager to learn and research new geomorphology principles and apply them in a field setting.

## Education

**Bachelor of Physical Geography, University of Manitoba, Winnipeg, Manitoba**

**2023 – Present**

*Area of Specialization - Geomorphology*

*GPA: 4.33 / 4.5*

**Software Development Diploma, Manitoba Institute of Trades and Technology**

**2020 – 2021**

*GPA: 4.4 / 4.5*

### **Relevant Coursework:**

|                                |                                          |
|--------------------------------|------------------------------------------|
| Geomorphology                  | Glacial Geology                          |
| Cryosphere Geomorphology       | Process Hydrology                        |
| Geographic Information Systems | Weather and Climate                      |
| Field Readiness                | Technical Writing and Project Management |
| Statistical Analysis           | Natural Hazards                          |

### **Academic Awards**

*Dr. A.W. Hogg Undergraduate Scholarship, 2025*

*Clayton H. Riddell Faculty of Environment, Earth, and Resources Undergraduate Admission Award, 2024*

*UMSU Scholarship, 2024, 2025*

*Dean's Honour List, Fall 2024, Winter 2025*

*Math / Science Award, 2020*

## Skills

### **Technical Training in Physical Geography**

- Researched the Assiniboine River risk of avulsion, assessing flood risk along the channel southwestern portion, utilizing new method of risk assessment from new research.
- Trained in basic field skills including fire starting and safety, navigation and map reading using compass and GPS, wildlife snaring, epidemiology and safety.
- Analyzed climate and hydrology datasets using Excel, interpreting, generating graphs and charts from the data to communicate information.
- Conducted spatial analysis of the geomorphology of fluvial systems, identifying erosional and depositional features and areas.

- Identifying surficial processes and features utilizing topographic and geological maps, and photogrammetry.
- Interpreted weathering data from river sediment data, to assess landscape weathering and erosion rates and basin lowering.
- Derived hydrology information from rainfall data to identify ground water flow, overland flow, and stream flow.
- Examined mineral and rock samples and identified them correctly, utilizing a streaking plate and hand lens in short time frames.
- Aided in sedimentology field work, gathering stratigraphic sections in badlands utilizing RTK GPS units, Jacobs staff and grain size collection.
- Summarized a series of natural hazards, compiling academic sources, news coverage, and government reports, into one-page reports of the event describing and recommended changes.
- Devised instructional documents using technical writing for internal company records, detailing features and providing comprehensive instructions on their features.
- Assessing soil and water quality and sources of contamination.
- Utilized climate models and meteorological data to observe weather patterns and climate conditions identifying features of extratropical cyclones and rainfall patterns.
- Administered distribution of data, probability, regression, and goodness of fit tests.

### ***Computer Skills***

- Experience utilizing AutoCAD to create design drawings and construct plans.
- Proficient in GIS software both QGIS and ArcGIS Pro, both to document geospatial analysis and georectification and RTK data.
- Adept in the Microsoft Office Suite including Word, PowerPoint and Excel and G Suite including Docs, Slide, and Sheets.
- Experience as a software developer using a wide number of programming languages, including C++, C#, and JavaScript.
- Administered various database software such as SQL server and MySQL, managing and interpreting large datasets for management and customers.
- Utilized R, MATLAB, and Excel to conduct statistical analysis of datasets, such as hydrographs, and average precipitation.

### ***Communication***

- Promoted company sustainability efforts to provide greater interest and improve sales.
- Collaborated with team members on a regular basis to come up with new solutions to help local businesses improve marketing performance
- Aided technical interviews of new software development interns, to help management better decide on candidates.
- Coached coworkers on software usage so they could act independently while performing store duties

### ***Leadership and Project Management***

- Organized and planned a research project independently, managing tasks, data collections, and report writing.
- Coordinated between developers and business analysts to work together to design and prototype website features for internal and external use.
- Taught new employees opening and closing duties, to maintain shop cleanliness and appearance.
- Assigned tasks to team members based on their preferences and strengths, to best utilize limited resources.

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## Employment History

**Research Assistant.** University of Manitoba Department of Earth Sciences **May 2025 – August 2025**

- Analyzed LiDAR data using QGIS to create Digital and relative elevation models to map floodplains and gather cross sections of rivers and surrounding floodplains.
- Conducted geology field work assisting in gathering stratigraphic sections, GPS points and navigation
- Systematized method for identifying areas at high risk of an avulsion flood using LiDAR data.
- Analyzed cross sectional data of river geomorphology to estimate river bathymetry
- Reviewed cause of avulsion and applied them to our study area, planning appropriate data collection.
- Authored a technical report at the end of the research summarizing findings and procedures.

**Chocolate Connoisseur.** *Purdy's Chocolatier, Winnipeg, Manitoba* **Oct 2023 – Sept 2024**

- Facilitated stock organization, keeping detailed tracks of exact stock counts, and their location in storage, prioritizing efficiency through ease of access.
- Keyholder; responsible for opening and closing the store and manager on duty.
- Resolved customer service issues through calm communication creating repeat customers.

**Software Developer.** *Rally the Locals, Winnipeg, Manitoba (Remote)* **June 2021 – March 2022**

- Compiled datasets based on website traffic into reports, readable and understandable to even non-technical team members, to understand website growth.
- Developed feature that synced with external data source via PHP and JavaScript to track metrics.
- Maintained company servers to ensure constant uptimes and regular backups.

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## Community Involvement

**Undergraduate Research Showcase Poster Presentation,** *University of Manitoba* **2025**  
*Assessing Avulsion Flood Risk Along the Assiniboine River in Southwestern Manitoba*

**Event Volunteer,** *University of Manitoba Faculty of Environment, Earth, and Resources* **2025 – Present**

**Member,** *Western Inter-University Geoscience Conference 2026 Planning Committee* **2025 – 2026**

**Member,** *University of Manitoba Wetlanders (Student group)* **2024**

**Co-President,** *Youth's Encouraging Sustainability (Club)* **2018 – 2019**

**Member,** *Youth's Encouraging Sustainability (Club)* **2017 – 2018**

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## Interests

- Dungeons and Dragons
- Miniature Painting
- Hiking