# **JOSHUA DESGAGNÉS**

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### **EDUCATION**

## BRITISH COLUMBIA INSTITUTE OF TECHNOLOGY

Advanced Diploma

Geographic Information Systems (GIS)

https://joshdesgagnes.github.io/gisportfolio/

Burnaby, British Columbia May 2025

# UNIVERSITY OF MANITOBA - ASPER SCHOOL OF BUSINESS

Winnipeg, Manitoba

Apr 2022

Bachelor of Commerce (Honours)

Double Major: Accounting, Management Information Systems (MIS)

## **TECHNICAL SKILLS & LANGUAGES**

- Technical Languages: Competent: SQL, Python (ArcPy, Pandas); Working Knowledge: HTML/CSS, PHP, JavaScript.
- Data Management & ETL Tools: Proficient: FME Form; Competent: DBeaver, Azure SQL Database; Academic Exposure: Oracle 19c, PostgreSQL.
- GIS & Visualization Tools: Proficient: ArcGIS Pro, ArcGIS Experience Builder, ArcGIS Dashboards, QGIS; Competent: Apache Superset; Working Knowledge: AutoCAD, Tableau.
- Languages: Native proficiency in English and French.

#### WORK EXPERIENCE

## RENTAL PROTECTION FUND

Vancouver, British Columbia

Apr 2025 - May 2025

Geospatial Database Developer Intern

- Led the design and implementation of a relational database in Microsoft Azure SQL Database with DBeaver to manage spatial and non-spatial housing and applicant data.
- Created automated ETL pipelines with FME Form to streamline data ingestion, validation, and integration.
- Deployed interactive dashboards using Apache Superset to support fast, ad hoc analytical querying of Azure SQL Database data, enabling management to access real-time business intelligence for decision-making and operational planning.

**BOOKE & PARTNERS** Winnipeg, Manitoba Jan 2023 – Aug 2024

Staff Accountant

- Prepared financial statements for reporting and tax purposes using Caseware and QuickBooks.
- Completed hundreds of tax returns for individuals, corporations, and trusts, along with corresponding tax slips.
- Managed high-volume tasks in a fast-paced environment, maintaining high-quality standards under demanding deadlines.

# ACADEMIC PROJECTS

# INCIDENT REPORTING WEB APPLICATION

Apr 2025

https://github.com/joshdesgagnes/experience-builder-app

- Developed a custom ArcGIS Experience Builder application using React, TypeScript, and ArcGIS Maps SDK for JavaScript, enabling community-sourced incident reporting with user location detection, image attachments, and form validation.
- Designed and implemented two modular, reusable widgets (map-view and vgi-feed) to support interactive map visualization, keyword-based filtering, and real-time data synchronization between user submissions and the map interface.

## INFORMATION SYSTEMS STRATEGY

Apr 2022

- Conducted an analysis of a major Canadian transportation company's services and information systems, collaborating with the VP of Network Analytics & Development to create a proposal addressing industry and technology constraints.
- Produced a report highlighting the alignment between the company's current business strategy and their key information systems to validate the development of a strategic expansion.

**CHESS DATABASE** Dec 2021

- Designed a database intended to view and manage collections of chess games for player preparation and analysis.
- Processed and transformed data from thousands of Portable Game Notation (PGN) files using Pandas, organizing it into CSV files for database integration.
- Created a GUI in MS Access for data retrieval and analysis (e.g., opening win percentages by colour, opening variation move orders, most prevalent opening variations).