Jeremy Friesen

| LinkedIn: | GitHub:

EDUCATION

Carleton University

Ottawa, ON

Bachelor of Computer Science, Honours - Co-op option

Sept. 2022 - May 2027

- Artificial Intelligence and Machine Learning Stream
- GPA 3.59/4 (letter grade of B+)

AVAILABILITY

Available for 4 months beginning May 2025

EXPERIENCE

Science and Research Assistant

Jan. 2025 – April 2025

Public Safety Canada

Ottawa, ON

- Identified and interpreted patterns and trends in data analysis
- Drafted research proposals and delivered presentations as needed

Level 1 Analyst

Sept. 2024 - Dec. 2024

Royal Canadian Mounted Police

Ottawa, ON

- Worked as an IT01 Technical Analyst for the RCMP's Central Help Desk as a first point of contact for technical problems and requests through the call center phone system as well as the self-service ticketing system
- Provided first level support for over 200 applications
- Used troubleshooting methodology in order to better understand the issues at hand

Data Scientist for Complex Systems

May 2024 – Aug. 2024

National Research Council of Canada

Ottawa, ON

- Contributed to the AI for Logistics Program and Digital Technologies Research Centre, with emphasis on transportation, warehousing, infrastructure, and AI-driven modeling
- Analyzed complex sensor and historical datasets (geospatial, tabular, specification) to streamline data clarity and structure
- Utilized Python libraries (GeoPandas, Pandas, Matplotlib, NumPy, Seaborn) for annotations, visualizations, optimizations, and trend analysis

PROJECTS

cuHacking | Developper

Aug. 2024 - Present

- Designed backend architecture for user profiles using **Postgres** with **Drizzle ORM** and created ER diagrams with **Mermaid charts**
- Developed sections for an internal documentation site using **Fumadocs**, enhancing project organization and documenting guidelines, standards, and knowledge base
- Wrote end-to-end tests for the docs site with Playwright, demonstrating strong testing skills
- Integrated an **AI-powered pull request reviewer** to streamline team PR reviews, supporting the internal development workflow

Statsbomb DBMS | Python, Psycopg, JSON, Git

March 2024 – April 2024

- Developed a Database Management System in **PostgreSQL** for the Open-Source Statsbomb repository to store and query historical **JSON** football data, utilizing **Normalization Theory** techniques, **Entity-Relationship** diagrams and **Schema** diagrams to correctly store all attributes across tables
- Developed loaders in **Python** using the **Psycopg** library to efficiently load **JSON** data into the **PostgreSQL** Database and created efficient **SQL** queries, demonstrating strong technical knowledge

TECHNICAL SKILLS

Languages: Python, SQL (PostgreSQL), TypeScript, JavaScript

Frameworks & Libraries: React, Drizzle ORM, Node.js, Next.js, TailwindCSS, Shadcn/ui Data & Visualization: Pandas, GeoPandas, Matplotlib, Seaborn, Folium, Mermaid, Recharts

Testing & Documentation: Playwright, Jest, Fumadocs, MDX

Developer Tools: Git, Jupyter Notebooks, VS Code, PyCharm, IntelliJ