Mantaj Singh

(902) 698-1444 | taranpalbrar58@gmail.com | Wolfville, NS B4P 2C3

Portfolio: tajdata.co | linkedin.com/in/mantaj-s-9448a7271

Professional Summary

Computer Science student with hands-on experience across software projects, data analytics, and structured evaluation work. Strong foundation in Python, SQL, and web development, with practical experience building ETL pipelines, dashboards, and full-stack applications. Known for clear communication, documentation, and calm problem-solving in fast-paced environments. Seeking internships/co-op roles for Summer 2026 and Fall 2026.

Education

Acadia University   Wolfville, NS
Bachelor of Computer Science (Data Analytics)   *Expected Dec. 2026*
Relevant Coursework: Python Programming, Discrete Mathematics, Calculus, Statistics, Computer Architecture, Software Engineering, Artificial Intelligence, Operating Systems, Data Communication, Financial Accounting
Accolades: Student Excellence Scholarship, Dean's List 2024/25

Technical Skills

Programming: Python, Java, SQL, JavaScript, TypeScript, HTML/CSS (familiar: R, C, C++)

Data / Analytics: PostgreSQL, Power BI, Tableau, SQLAlchemy, Pandas, NumPy, scikit-learn, XGBoost

Web / Dev: React.js, Node.js, Express.js, Vite, Tailwind CSS, REST APIs

Tools: Git/GitHub, Docker, Vercel, RStudio, Excel, Microsoft Office

Systems: Windows, macOS, Linux (command line basics)

Experience

Research Assistant   Oct. 2024 – Present
For Professor Ryan Stack, Acadia University   *Wolfville, NS*

- Automated repetitive research workflows using Python and R, improving efficiency and consistency of analysis.
- Analyzed datasets from 160+ YouTube channels; summarized trends and findings for research discussions.
- Validated datasets and identified inconsistencies prior to analysis.

Online Data Analyst (Part-Time)   Sep. 2025 – Jan. 2026
TELUS International   *Remote*

- Reviewed 150+ AI-generated entries and ratings per shift for accuracy, relevance, and guideline compliance.
- Documented issues clearly and consistently; applied quality standards and attention to detail
- Worked independently under time expectations while maintaining high evaluation quality.

Courtesy Desk Associate   May 2025 – Aug. 2025
Walmart Canada   *New Minas, NS*

- Resolved customer issues by triaging concerns, explaining policies, and coordinating next steps with departments.
- Handled transactions accurately and maintained professionalism during high-volume periods.
- Strengthened problem-solving and communication skills through daily customer-facing support work.

Projects

Public Accountability Project | *Python, YouTube Data API, NLP, Sentiment Analysis*

Acadia University, YouTube MetaData Research (Ryan Stack)

- Built data pipelines to fetch channel/video metadata and comments across public-interest topics for analysis.
- Performed sentiment analysis and text mining to compare recurring themes and language patterns by region.

Key to the Kingdom (Java RPG Game) | *Java, Swing, OOP, Multi-threading*   Source
- Built a Java + Swing RPG with four explorable areas (Castle, Field, Cave, Village), NPC dialogue, inventory/items, and a quest system to retrieve the Legendary Key and return it to the Queen.
- Implemented a multi-threaded game loop targeting **50 FPS** with double-buffered rendering for smooth movement, collision-based navigation, and event-driven triggers (doors, NPCs, items).
- Designed modular systems (Map, Character, Event, Audio, UI) with chunk-based map loading and dynamic audio themes per region for an interconnected world experience.

Gradient Boosting Regression Model | *Python, Pandas, scikit-learn, XGBoost, Matplotlib*   Source
- Trained and evaluated an XGBoost regression model; compared results to baseline approaches.
- Performed hyperparameter tuning and feature importance analysis to support explainable results.

StudyLink | *React.js, Node.js, Express.js, Prisma, PostgreSQL, Docker, Vercel*   Source
- Built a full-stack web app with authentication and CRUD workflows; designed REST endpoints and UI flows.
- Deployed using Docker and Vercel; focused on maintainability, clean structure, and debugging.

Event Management System | *React.js, Node.js, Express.js, MongoDB, React Router*   Source
- Developed a responsive event management app; integrated front-end components with back-end APIs.
- Improved user flow with React Router and structured components for reliable navigation.

CERTIFICATIONS

Data Modelling & Analysis — McMaster University Continuing Education (Summer 2025, **A+**)

SQL (Intermediate) Skill Certification — HackerRank