

TAHA YAR KHAN

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TECHNICAL SKILLS

- Languages:** Python, Java, JavaScript, CSS, HTML, Bash, C, C++, Rust, Haskell
- Databases and Data Management:** SQL, MongoDB, NumPy, Pandas, TensorFlow.js, Scikit-learn
- Tools and Frameworks:** React, Chakra UI, Material-UI, Bootstrap, Tailwind, Node.js, Express.js, Mongoose, JWT, Flask, Docker, Git, GitHub, Postman, Selenium, Plotly, Matplotlib, Streamlit, JMeter, BCrypt, Linux, Windows, macOS, Visual Studio Code, Figma, REST API, RESTful API, Axios, Jira, Google Suite, Microsoft 365.

EXPERIENCE

Software Developer | BMO (Bank of Montreal)

Jan 2025 - Present

- Developed scalable web components for BMO's innovation platform, enhancing system maintainability and reusability.
- Accelerated sprint delivery cycles by rapidly prototyping features, enabling faster design validation and reducing feedback loops by **30%**.
- Enhanced platform performance by optimizing component rendering and resource loading, achieving a **30%** reduction in page load times.

Technology Research Analyst | BMO (Bank of Montreal)

Jan 2025 - Present

- Developed web scraping solutions using Selenium to extract data for **1,000+** companies enhancing automation and scalability.
- Increased scraper accuracy by **55%**, ensuring higher reliability and precision in extracted financial and employment data.
- Automated news tracking for 3-day news insights by building a system to parse, classify, and append RSS data into formatted Excel.
- Extracted relevant keywords with **80%+** match accuracy by engineering an NLP pipeline using zero-shot classification and Hugging Face Transformers.

Software Developer | MAX

May 2024 - Aug 2024

- Built scalable login and signup components using React and JavaScript, improving authentication workflows and input validation.
- Integrated RESTful APIs to streamline data flow between frontend and backend, improving system reliability and responsiveness.
- Implemented AWS Lambda functions using AWS SAM, optimizing backend performance and improving scalability for key user operations.

PROJECTS

CarbonX - JavaScript, Axios, React, Vite, Node.js, Express, MongoDB, REST API

Apr 2025

- Developed a RESTful API using Express and MongoDB for user authentication, footprint tracking, and carbon footprint comparisons.
- Integrated Axios with JWT authentication for secure data fetching, reducing retrieval time by **40%** and better model training efficiency.
- Designed and integrated endpoints for tracking water, electricity, and car usage, enabling personalized carbon footprint calculations.

Insight: AI Investment Chatbot - Python, Flask, JavaScript, React, Cohere API, Axios, Tailwind CSS, Vite, CORS

Apr 2025

- Developed a full-stack AI investment chatbot using Cohere's LLM, Flask, and React, enabling real-time query handling.
- Enhanced user experience by **60%** with optimized Axios-based API calls, dynamic state management, and interactive UI components.
- Streamlined prompt pipelines and integrated command-r, reducing response time by **50%** and consistently delivering replies under **3 seconds**.

Credit Card Fraud Detector - Python, Scikit-learn, Cohere API, NumPy, Pandas, Streamlit, Plotly, Matplotlib, joblib

Mar 2025

- Achieved **95%** accuracy by training a Random Forest model using stratified sampling and scaled features on fraud data.
- Improved fraud explainability by integrating Cohere's LLM API to generate natural language justifications for predictions.
- Reduced analysis time by **30%** by building an interactive Streamlit dashboard with batch prediction uploads and real-time visualizations.

Skill-Match - JavaScript, React, Vite, Tailwind CSS, Python, Cohere API, Supabase SQL, JMeter, BCrypt

Dec 2024

- Developed an AI volunteer matching platform with Cohere API, improving match accuracy by **30%** based on student skills/interests.
- Implemented authentication with access control, ensuring data protection, while supporting **10,000+** concurrent users.
- Built a responsive platform with **95%** of interactions under **2 seconds**, using Row-Level Security for efficient data management.

EDUCATION

- Toronto Metropolitan University (Formerly Ryerson University) - Bachelor of Science, Computer Science 2022-2026**
- CGPA:** 3.40/4.33
- Relevant coursework:** OOP, Data Structures and Algorithms, Software Engineering (Agile methodologies), Operating Systems, Probability and Statistics, Machine Learning, Artificial Intelligence, Database Systems, Data Analytics, Data Visualization and Computer Security.

CERTIFICATIONS

[Google Cloud Skills Boost] Introduction to Generative AI

Apr 2025

- Covered the fundamentals of large language models, responsible AI, and generative AI use cases using Google Cloud tools.