

Gabriel Jude

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Education

Toronto Metropolitan University (formerly Ryerson)

Toronto, ON

Bachelor of Science in Computer Science

Sept 2021-May 2025

Relevant Coursework: Machine Learning, Artificial Intelligence, Software Engineering, Data Structures, Algorithms, Database, Web Systems, Networks, Operating Systems, Computer Organization, Discrete Math

Languages: Python, C/C++, Java, Bash

Tools: WSL, Git, VMWare, Confluence, JIRA, AWS, Atlassian

Back End: AWS, Azure, Mongo dB, APIs Oracle SQL

Front End: HTML/CSS, React

Work Experience

Municipal Property Assessment Corporation (MPAC)

Pickering, ON

Junior Systems Developer (Co-op)

May 2024-Present

- Designed and developed an AI orchestration application that enables seamless chaining of LLMs such as Claude and locally hosted models, optimizing workflow automation and enhancing AI-driven decision-making.
- Engineered backend services using TypeScript and PostgreSQL, implementing scalable APIs to support AI model integration and real-time data processing.
- Built dynamic front-end interfaces using TypeScript and JavaScript, ensuring a smooth user experience for configuring AI pipelines and managing execution logs.
- Deployed and maintained AI-driven applications on AWS, leveraging API Gateway for secure API management and Cognito for authentication and user verification, while implementing CI/CD pipelines and robust version control (Git).

Toronto Metropolitan University Rare Disease Club

Toronto, ON

Full-Stack Software Developer Intern

May 2023-Present

- Revamped the club website by transitioning it from basic HTML code to a mobile-responsive React-based website, resulting in a 50% increase in page views and a 20% decrease in bounce rate
- Steered a strategic Full Stack refactoring initiative, adeptly managing the software development lifecycle and meeting project milestones within strict timelines.
- Optimized website speed and performance by reducing page load time by 50%, resulting in a 15% increase in organic search traffic.

Personal Projects

[Portfolio](#)

Unsupervised Learning Model: Toronto House Prices

Python, Scikit-learn, Matplotlib

- Developed a machine learning project on Toronto housing prices using Kaggle data. Achieved over 90% accuracy in clustering through meticulous preprocessing, including K-Means and hierarchical algorithms.
- Utilized data visualization techniques, like scatter plots and an elbow diagram, to gain insights into the Toronto housing dataset. Demonstrated proficiency in interpreting clustering results, achieving optimal cluster determination.
- Evaluated K-Means and hierarchical clustering, comparing metrics like the Silhouette Score. Successfully drew meaningful conclusions, identifying location-based patterns in Toronto housing prices.

Discord Bot Application

Python, Google Calendar API, Azure Hosting

- Developed a Python-based Discord Bot with Google Calendar API integration for efficient retrieval and display of students' daily schedules, improving community event organization and communication.
- Established a high-performing Linux Virtual Machine on Microsoft Azure to host the Discord Bot, achieving an impressive 1% downtime for continuous and reliable operation.
- Seamlessly connected Google Calendar API and Discord Bots through detailed documentation analysis, enhancing functionality and user experience in the Discord Bot application.

Campus Mapper App Suite

Java, Android Studio, HTML, CSS, Javascript

- Collaborated in crafting a robust Android application and website, providing an integrated solution for seamless campus navigation.
- Orchestrated the backend authentication service and implemented a secure database using Google Firebase and Java, ensuring a reliable and protected user sign-in experience.
- Contributed to the intuitive user interface of the Android app using XML and Android Studio, while also enhancing the website's user experience with an HTML-based dropdown menu.