

JEREMY THUMMEL

STOUFFVILLE, ONTARIO | thummeljeremy@gmail.com | +1 647-268-8749 | GRADUATING SUMMER 2027

SKILLS

- Experienced with developing and optimizing SQL databases using Azure Data Studio integrated through Python.
 - Developed a movie rating application in Python where users could rate and review movies.
 - User data (ratings and reviews) was queried and visualized through a Jupyter Notebook in Microsoft Azure Data Studio.
- Strong backend programming experience and API design skills.
 - Built RESTful APIs including an email spam detection service with algorithmic logic for filtering and decision-making.
- Hands-on experience with Java server development and WebSocket programming.
 - Built real-time multiplayer systems for an online Connect 4 styled game with Java server logic and WebSocket communication to ensure a low 24ms latency and reliable client synchronization.

EDUCATION

4.06GPA

BACHELOR'S IN COMPUTER SCIENCE (HONS)

SEPTEMBER 2022 - MAY 2027 | 4TH YEAR

Ontario Tech University

Oshawa, Ontario

- Applicable Courses: Intro to Computer Science, Programming Workshops I & II, Computer Architecture I, Scientific Data Analysis, Data Structures, Discrete Mathematics for Computer Science, Software Systems Development & Integration, Software Design and Analysis, Computational Science I, Database Systems & Concepts, Analysis & Design of Algorithms, Machine Learning Theory & Application.
- Recipient of the 2022 Fall Semester, 2023 Winter Semester, and 2024 Winter Semester President's List Award.
- Currently studying for PL-300 Power BI certification.

WORK EXPERIENCE

COMPUTER SCIENCE INTERNSHIP

JANUARY 2025 - DECEMBER 2025

Teknion Furniture Systems

North York, Ontario

- Engineered a JavaScript application to streamline label printing for the internal manufacturing plants.
- Created and designed SQL schema to simplify provisioning permissions and software for external and internal employees.
- Developed automated API tests in PowerShell to validate the security of authenticating in specific enterprise applications.
- Designed database rules and PowerShell scripts to control the handling of employee data across Microsoft 365 applications.

TECHNICAL DIRECTOR

OCTOBER 2024 - APRIL 2025

Google Developer Student Clubs

Oshawa, Ontario

- Run and organize workshops that teach students how to better utilize new and emerging technologies.
 - Setup demonstrations showcasing how to use Cohere's AI platform through REST API calls in Python projects.
 - Hosted lectures analyzing Google's Gemini AI, and how it powers Google's NotebookLM platform.

PROJECTS

PRODUCT IN-STOCK TRACKER APPLICATION - PERSONAL PROJECT

AUGUST 2025

- Built an open source Python application to monitor online product availability, parsing HTML content, filtering results, and ensuring accurate detection of new items.
 - Integrated SMTP for automated real-time email alerts regarding product availability.

EMOJIABLE - MACHINE LEARNING

DECEMBER 2024

- Collaborated with a four-person team using Git for version control to develop a model that would generate images of emojis.
 - In Python we designed a Deep Convolutional Generative Adversarial Network using TensorFlow to pass from layer to layer, with a custom generator and discriminator, transposed convolution and batch normalization, along with LeakyReLU layers to produce images that take the appearance of various emoji styles.
 - Image datasets were processed with NumPy, Pandas, and OpenCV libraries.
 - Matplotlib was used to graph loss curves, difference between samples and produced emojis, and mode collapse.

CHATNOW (ONLINE CHAT ROOM PLATFORM) - SOFT. SYSTEMS & INT.

APRIL 2024

- Collaborated with a three-person team to program a chat service with real-time messaging.
 - Engineered server-side functionality with Java and WebSockets, enabling dynamic chat room creation and user session management, allowing for multiple publicly and privately hosted rooms with customization via JavaScript elements.