

Education

University of TorontoMississauga, CanadaGPA 3.9/4.0 - Bachelor of Science, Computer Science Specialist & Math MajorDean's List Scholar

Technical Skills

Languages : Python, JavaScript, HTML, CSS, SQL, LaTeX **Frameworks** : Django, FastAPI, Flask, Tailwind, Bootstrap

Technologies: PostgreSQL, AWS, Supabase, Git, nginx, Postman, Render, Google Cloud Platform, Mapbox

Certificates: AWS Certified Cloud Practitioner (in progress), IB Computer Science (Web Science)

Work Experience

Vice President of Technology

May 2025 - Present

UTMSAM Hybrid – Toronto, Canada

- Collaborate with <u>5 technical associates</u> to maintain the front-end and back-end of the <u>UTMSAM website</u>
- Spearhead EmberHacks, a 48 hours long hackathon, attracting <u>150+ students</u> across three UofT campuses

Host workshops on solving <u>LeetCode questions</u> and using AI and quantitative tools (<u>MATLAB</u>, <u>SageMath</u>, and <u>LaTeX</u>)

Standard Operation Procedure Intern

May 2025 – Present

TRG International (Full-time)

On-site - Ho Chi Minh, Vietnam

- Created a <u>Flask</u> application to simulate real-time git-diff functionality for Word documents using polling techniques, improving version control and reducing manual review time by <u>25%</u>
- Developed <u>2 Power Platform bots</u> to send notifications to up to <u>150+ employees</u> about upcoming events
- Managed and updated high quality SOP documents across departments: Marketing, Sales, and HR
- Represented TRG at Greenwich Career Fair, achieving "Most Interactive Company" title with 200+ applicants

Computer Science and Mathematics Mentor

September 2022 – Present

University of Toronto & British International School

Hybrid - Toronto, Canada

- Conduct weekly tutoring sessions for first-year students in <u>Computer Science</u> (OOP and DSA) and <u>Mathematics</u>
- Instructed <u>30+ secondary students</u>, resulting in an average <u>10% improvement</u> in grades

Design Technology Ambassador

British International School

November 2022 - May 2024

On-site - Ho Chi Minh, Vietnam

- Facilitated 3 departmental welcoming events, introducing 120+ parents and students to Design Technology
- Showcased engaging presentations and interactive 3D software, including aluminum die-casting workshops

Projects

UTM-Live (in progress) Python (Django), Mapbox GL, PostgreSQL (Supabase), AWS (S3) Source Code

- Make a <u>full-stack</u> interactive <u>3D mapping application</u> to help students discover interesting study spots
- Style a personalized map, leveraging custom <u>GeoJSON schemas</u> and <u>vector tilesets</u> to render campus locations
- Improve user experience with numerous <u>3D buildings</u>, <u>dynamic weathering</u>, and <u>seamless mouse movements</u>
- Organize the front-end using Django MVT structure. Enforce a relational database schema using Django ORM

Image Gallery Python (FastAPI), AWS (EC2, S3, CloudFront, Lambda, DynamoDB), Postman Source Code

- Built a <u>scalable</u>, <u>serverless</u> image gallery with real-time uploads, using <u>S3</u> and <u>DynamoDB</u> for storage/metadata
- Set up global caching using CloudFront CDN. Reduced the average images load time from 220ms to 35ms
- Implemented client-side image compression with Canvas API, automated daily cleanup of expired files via Lambda
- Tested and validated RESTful API endpoints with <u>Postman</u>, ensuring reliable backend performance

ob Hunter Python (Django), PostgreSQL (Supabase), AWS (EC2), NPTK, Matplotlib Source Code

- Designed a <u>Django-based</u> job scraping and analysis tool across platforms (LinkedIn, Indeed, Google)
- Engineered a cover letter generator using keyword extraction and NLP, saving users 90% of manual writing time
- Visualized market trends using Matplotlib and Chart.js. Highlighted top skills and demanding technologies
- Stored job listings using <u>PostgreSQL</u> and <u>Supabase</u>. Deployed the web application using <u>AWS EC2</u>

Youtube as a Service Python, Tailwind, Google Cloud, OpenCV, Numpy Source Code

- Created a pipeline to compile files into Youtube videos, allowing unlimited storage space and lossless decoding
- Produced compression-tolerant algorithm, achieving 99.9% accurate bit-level file recovery
- · Integrated frame optimization, resolution tuning, and error correction for high-resolution files

Other Experience

Content Creator & Video Editor

May, 2020 - July, 2024

 $\bullet \ \ \text{Managed a YouTube channel with } \underline{14,000 \ members}, \underline{3 \ million \ viewers}, with \underline{4 \ years} \ of \ video \ editing \ experience$

Create and Care Club Leader

September, 2022 – January, 2024

• Led team of 8 to teach 20 students product design; sold at 3 events with 2,000+ guests, generating \$1,200 revenue