

An aspiring research assistant at UofT seeking for opportunities!

#### **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, LaTeXFrameworks : Django, FastAPI, Flask, Tailwind, Bootstrap

**Technologies** : PostgreSQL, Mapbox, AWS, Supabase, Git, Postman, Render, Google Cloud Platform **Certificates** : AWS Certified Cloud Practitioner (in progress), IB Computer Science (Web Science)

### **Work Experiences**

#### **Vice President of Technology**

May 2025 - Present

UTM Student Society for Algorithmic Modelling (UTMSAM)

Toronto, Canada

- Collaborate with <u>6 technical associates</u> to revamp the <u>UTMSAM website</u>
- Spearhead EmberHacks, a 48-hour hackathon, attracting students across 3 UofT campuses
- Host workshops on web development, LeetCode, AI, and quantitative tools (MATLAB, SageMath, LaTeX, etc.)

#### **Standard Operation Procedure Intern**

May 2025 – August 2025

Ho Chi Minh, Vietnam

TRG International (Full-time)

- Created a version control tool for Word documents using Flask to reduce manual review effort by 25%
- Notified <u>150+ employees</u> of events by developing a Power Virtual Agent, reducing communication time by <u>40%</u>
- Automated geocoding of 100+ addresses using Python and researched relevant geospatial resources
- Represented TRG at Greenwich Career Fair, achieving "Most Interactive Company" title with 200+ applicants

### **Design Technology Ambassador**

November 2024 – May 2024

**British International School** 

Ho Chi Minh, Vietnam

- Facilitated 3 departmental welcoming events, introducing 120+ parents and students to Design Technology
- Showcased engaging presentations and <u>3D CAD softwares</u>, including aluminum die-casting <u>activities</u>

#### **Computer Science & Math Mentor**

September 2022 - May, 2025

University of Toronto & British International School

Toronto, Canada

- Conducted weekly tutoring sessions for first-year students in Computer Science (OOP and DSA) and Math (proofs)
- Turned complex concepts into digestible ideas, improved average grades by 15%, received 100% positive feedbacks

### **Club Activities**

# **Project Lead** @ *UofT Blueprint*

August 2025 - Present

• Cooperate as a team to build <u>custom software solutions</u> for social good

## Workshop Lead @ Ignition Hacks V6

July 2025 - Present

• Plan technical workshops on Mapbox technologies for a 36-hour hackathon with 600+ anticipated participants

# **Co-President** @ Create and Care

September 2022 – January 2024

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

## **Projects**

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

- Make an interactive <u>3D full-stack application</u> for UTM students to explore study spots
- Enhance UX with <u>real-time dynamic lighting/weather effects</u> and seamless mouse interactions
- Manually modeled <u>80+ campus locations</u> using Mapbox GL and custom GeoJSON data
- Secure user access with JWT-based auth and Django session

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

- Built a serverless image gallery with real-time uploads, using S3 and DynamoDB for storage/metadata
- Set up global caching using CloudFront CDN. Lowered the average images load time from 220ms to 35ms
- Compressed client-side images using Canvas API and reduce upload payloads by 60%
- Tested RESTful API endpoints with Postman and automated expired file cleanup with Lambda

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

- Scraped and aggregated 100+ job postings from LinkedIn, Indeed, and Google using Django
- 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, identifying top in-demand tech skills

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

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