mika.sustar@alumni.utoronto.ca github.com/meeksfr

# EDUCATION

### University of Toronto: Industrial Engineering

Bachelor of Applied Science, Dean's Honour List for all semesters

Graduated with High Honours: April 2024

GPA: 3.92/4.00

Capstone Project (First Place Award Winner): Developed a full-stack app (Flask, HTML/CSS/JS) for analyzing public comments about infrastructure projects, featuring an automated dashboard and custom RAG-LLM agent for Q&A without hallucinations, reducing our client's required time and labour for public opinion evaluation by 95%

Relevant Courses: Algorithms, Artificial intelligence, Data modeling, Decision support systems, Design & analysis of information systems, Human-centred systems design, Machine learning, Object-oriented programming

# EXPERIENCE

### University of Toronto: Data-Driven Decision Making Lab

April 2024 - Present

Software Engineer

- Developing novel training pipelines for Large Language Models (LLMs), extending methods like DPO and RLHF
- Optimized jobs for distributed compute clusters, reducing training downtime by 96% through hyperparameter tuning and workload scheduling improvements
- Presented POCs to Meta and Amazon, demonstrating how LLM-driven search can enhance product discovery and user experience at scale
- Built a product search system for conceptual queries (e.g., "I need shoes for clubbing, but it's cold out"), using LLM-powered query expansion to leverage efficient dense retrieval and ranking

Ritual.co May 2022 - June 2023

Software Development Engineer in Test

- Developed and maintained an automated testing suite (unit, integration, and E2E), increasing test coverage by 86% while reducing manual testing time by 70%
- Diagnosed issues across mobile, web, and backend services by cross-referencing cloud logs, network requests, API responses, SQL databases, and Git version history
- Proactively developed and deployed hotfixes, reducing developer turnaround time and preventing bugs

### MCW Consultants Ltd.

May 2021 - September 2021

Sustainability Intern

- Conducted technical and regulatory analysis to ensure building proposals met sustainability standards

Sandbox Studios October 2017 - March 2020

Audio Engineer

- Engineered studio sessions for 35 artists, helping create songs that collectively amassed over 10 million streams

# PERSONAL PROJECTS

### **Backing Track**

Python, Flask, React (TypeScript), Axios, Vite, Spotify API

 Developed a full stack application that automatically fetches relevant YouTube beats based on a user's Spotify playlist, featuring metadata scraping and automatic key/BPM extraction

#### Recently Posted

Java, Spring Boot, PostgreSQL (Supabase), AWS (Lambda), React Native, Expo

- Developing an iOS/Android app that automatically fetches new job openings directly from employer sites

## Mika Online (mikaonline.ca)

HTML, CSS, JavaScript

- Created my personal website from scratch, featuring interactivity inspired by point and click adventure games

### SKILLS

Languages: Python, Java, SQL, HTML / CSS, and JavaScript

Frameworks/Libraries: Flask, Django, PostgreSQL, React, Pandas, PyTorch, and Transformers

Testing: Postman, Selenium, REST Assured (Java), and Playwright (TypeScript)

DevOps/Tools: Jira, Jenkins, Google Cloud Platform, Docker, Agile methodology, CI/CD