

# Elham Badri

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## EDUCATION

### University of Toronto

Honors Bachelor of Science - Computer Science, (3.7 GPA)

Toronto, ON

Expected May 2025

## EXPERIENCE

### Backend Engineer

July 2024 – Present

University of Toronto, (MiCA)

Toronto, ON

- Architected an organization directory app with Next.js, Express, and PostgreSQL for 50,000+ organizations
- Owned backend systems, designing and implementing APIs, database schemas, and business logic
- Built a Go CLI tool to automate ingestion of 100,000+ Excel rows, reducing manual data entry time by 95%

### Software Engineer Intern

Sept. 2023 – Apr. 2024

Taq Automotive Intelligence

Markham, ON

- Transformed a monolithic ASP.NET application to a microservices architecture improving maintainability, scalability, and reducing operational costs by 10%
- Migrated applications from Rackspace to AWS with Kubernetes and Docker, using OpenLens for debugging
- Designed a file conversion and compression microservice increasing performance and reducing file sizes by 25%
- Improved efficiency of internal Python scripts by 60% through implementation of multi-threading

### Software Engineer

Mar. 2023 – Sept. 2023

University of Toronto (CCS)

Toronto, ON

- Integrated Sentry error tracking, resulting in 20% decrease in MTTR and improving product stability
- Implemented an advanced tagging system, improving file organization and search efficiency by 12%
- Refactored React routing and forms, reducing task time by 20%, and increasing form submission success rate

### Software Engineer Intern

Sept. 2022 – Dec. 2022

Oracle

Toronto, ON

- Implemented UI and backend features using Java, TypeScript, and SQL, enhancing user experience
- Drove a 60% improvement in search speed and user satisfaction through development of new search feature
- Refactored SQL statements to use bind variables, boosting query speed by 20% and preventing SQL injection

### Software Engineer Intern

Jan. 2022 – May. 2022

Sunnybrook Research Institute

Toronto, ON

- Developed, documented, and maintained a medical time series analysis and annotation application using JavaScript, jQuery, Meteor and MongoDB, resulting in positive feedback by a panel of sleep health experts
- Refactored code to increase efficiency, implementing channel scaling, translating channels, and reversing the polarity of channels, enhancing application speeds by 300%
- Integrated user annotations, crosshair sync, and selective channel rendering, increasing user efficiency by 50%

## PROJECTS

### LangChain (Open Source Contribution) | Python

- Resolved streaming implementation issues for Ollama models, restoring incremental content generation

### Taleweaver | Angular, GCP, Docker, Github, Node.js, Express, Yjs, Redis, BullMQ, TS, Tailwind, Postgres

- Developed an AI story creation app using OpenAI apis with real-time collaboration via Yjs and WebSockets
- Created a task queue using Redis and BullMQ to handle long running tasks, improving user experience
- Automated deployments with a CI/CD pipeline on AWS Lightsail using GitHub Action

## SKILLS

**Languages:** Java, Python, Go, TypeScript, JavaScript, SQL, C, C#, HTML, CSS, Bash

**Frameworks/Libraries:** Spring, Next.js, Node.js, Flask, Express.js, ASP.NET, React, Angular

**Databases/Cloud:** PostgreSQL, MongoDB, Redis, MySQL, Google Cloud Platform, AWS, Kafka, Cassandra

**Tools:** Git, Docker, Kubernetes, Perforce, Linux, JMeter, Github Actions