Omar Khamis

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EDUCATION

University of Toronto — Sept. 2022 – July 2026 (Expected)

Honours Bachelor of Science in Computer Science - GPA: 3.9/4.0

- **Relevant Courses**: Data Structures, Software Design, Computer Organizaiton, Theory of Computation

Awards

- **Dean's List Scholar (2023)**: Cumulative GPA of 3.5 or higher after completion of a year
- **Scholar's Award**: Merit-based scholarship for being one of the most outstanding students to apply
- **UKMT Senior Math Challenge Gold**: Showcased exceptional problem-solving and mathematical talent

EXPERIENCE

Junior Business Analyst — Apr. 2023 – Aug. 2023

AppLab Qatar — *Doha, QA*

- Implemented a **machine learning** model for name entity recognition to extract key details from resumes
- Utilized **OpenAI** language models to power a chatbot implementation on a website serving **10,000** users
- Created software architecture diagrams for scalable solutions leveraging **Microsoft Azure** cloud services
- Developed a scoring system to match resumes with relevant job postings

Tutor — July 2020 – Present

Self-Employed

- Provided one-on-one tutoring sessions for high school mathematics and computer science
- Developed personalized lesson plans and teaching materials to each student's needs
- Monitored and evaluated student progress, adapting teaching methods accordingly

PROJECTS

For more, check out okhamis.com

HufCompress | *Python, Flask, JavaScript, Bootstrap, Jinja, HTML/CSS*

- Developed a **lossless** file compression and decompression application using Huffman coding
- Implemented file handling functionalities to achieve compression ratios of up to **50%** for large text files
- Utilized **Flask** web framework and **Bootstrap** to create a user-friendly interface for file upload and download
- Displayed compression statistics, including original size, output size, and percentage reduction, providing insights into the effectiveness of the compression algorithm for various file types

ResumeMatch | *Python, NLTK, scikit-learn*

- Developed a job-resume matching system using term frequency-inverse document frequency
- Preprocessed text data with **NLTK** and created **TF-IDF** vectors using **scikit-learn**
- Calculated cosine similarity to determine the similarity between job descriptions and resumes

PixelSketch | *JavaScript, HTML/CSS*

- Created a web app for creating pixel art by drawing on a grid using **JavaScript**
- Implemented adjustable grid size and color options for customized artwork creation

TicTacToeAI | *Python, Pygame*

- Implemented a Tic-Tac-Toe game with an AI player using the **minimax** algorithm
- Created a graphical user interface using **Pygame**

Alice Programming Competition | *Alice*

- Led a team in developing a game using **Alice** hosted by Carnegie Mellon University
- Demonstrated strong leadership skills with team members and delivered an engaging project

TECHNICAL SKILLS

Languages: Python, C++, HTML/CSS, JavaScript, SQL
Frameworks: React, Node.js, Flask, FastAPI, Bootstrap,
Developer Tools: Git/Github, Microsoft Azure, Figma
Libraries: NLTK, PyTorch, NumPy, scikit-learn