416-456-0091 Toronto sourena.khanzadeh@gmail.com

# Sourena Khanzadeh

Portfolio Website GitHub: sourenaKhanzadeh LinkedIn: sourenaK

#### **EDUCATION**

## Master of Computer Science

Sept 22 - Aug 24

Toronto Metropolitan University

Main courses: Heuristic Search, Deep Learning, Research Methods in Computer Science, Computer Security and Analysis

## **Bachelor of Computer Science**

Sept 18 - Dec 22

 $Toronto\ Metropolitan\ University$ 

Main courses: Machine Learning, Artificial Intelligence, Reinforcement Learning, Computer Vision

## WORK EXPERIENCE

Software Engineer Aug 22 - Sep 22

NTN Company Toronto

As an Angular software engineer at NTN, I was responsible for developing and maintaining a web admin portal for the company. Utilizing technologies such as Angular, Node, Firebase, and Sass, I successfully built and deployed the portal, learning Firebase on the spot in the process. My work on the web admin portal required strong problem-solving skills and attention to detail, and I was able to deliver high-quality results despite facing new challenges and learning new technologies. I am proud of the contributions I made to NTN, and I am confident that my experience there has prepared me to excel in future software engineering roles.

#### TOP PROJECT

Snake AI Mar 21

Advanced Reinforcement Learning Project

The Snake game that I developed is a classic arcade game that has been re-imagined using the latest advancements in reinforcement learning and deep learning techniques. The game was built using Pygame and PyTorch, two widely-used and well-established Python libraries. The game utilizes reinforcement learning algorithms to train the snake on how to move and react to its surroundings. By training the snake to learn from its mistakes and optimize its movements, I was able to create a game that is both challenging and engaging for the player. To improve performance, I implemented multiple processes, allowing the game to run smoothly even on lower-end devices. The result is a high-quality and visually-appealing game that offers an engaging and entertaining experience for players of all skill levels. Overall, my Snake game demonstrates my proficiency in Python, PyTorch and reinforcement learning and my ability to apply these skills to create a polished and engaging game that offers an enjoyable experience for players.

#### SKILLS

Programming Python, Java, C, ,C++, Git, IATEX, Matlab, MERN Stack, MEAN Stack, Swift

Communication Farsi (native), English (native)

Other Adobe Products, Microsoft Products