# Talha Abbasi

431-688-0069 | talhamunir44783@gmail.com | linkedin.com/in/talha-abbasi-08311125a | https://github.com/ABBASITM

#### EDUCATION

University of Manitoba

Winnipeg,MB

B.Sc. Honors in Computer Science and Statistics Joint Minor in Mathematics (4.37/4.5)

Sep. 2023 - Sep 2027

Beaconhouse College Programme

Islamabad, PAK

A Levels in Pure Sciences (Biology (A), Chemistry,  $(A^*)$  Physics  $(A^*)$ , Mathematics  $(A^*)$ )

Sep. 2020 - Sep 2022

Coursera

Online

 $Google\ Advanced\ Data\ Analytics\ Professional\ Certificate$ 

Dec.2022 - March 2023

## Projects

**Ludo AI** | Python, Reinforcement Learning, PyTorch, Q learning, TensorFlow

Sep 2023 – Jan 2024

- Developed an AI agent for Ludo using reinforcement learning techniques, specifically Q-learning, to enhance decision-making and gameplay strategies.
- Implemented a game interface using Pygame, facilitating real-time rendering and event management to create an engaging user experience.
- Designed and integrated a QNetwork class with neural networks to enable adaptive learning and strategic gameplay for each AI player.
- Analyzed game dynamics and implemented complex strategies, including risk assessment and opponent interaction, to improve the AI's performance in a competitive environment.

Car Sales By Location | Data Structure, C++

Dec 2022 - Jan 2023

- Developed a car sales parsing program in C++ utilizing a 2D hash graph for efficient storage and retrieval of car location data based on latitude and longitude coordinates.
- Implemented a hash table to organize and access car data, using make and model as keys for quick lookups.
- Designed a trie data structure to facilitate fast searches of car data by country, enhancing data retrieval efficiency.
- Utilized chained binary search trees (BSTs) to sort and manage car data by attributes such as age, price, and purchase date, improving data organization and access times.

## LEADERSHIP AND ACTIVITIES

#### Manitoba Cricket Association Division 2 | BloomField

May 2024 – Present

• Played as an leg spin bowling all rounder and the team placed overall 4th in the MCA Summer 24 tournament.

Peer Tutor | Introductory CS, Mathematics and Statistics Courses

Jan 2024 – Present

• Provided peer tutoring for introductory computer science, mathematics, and statistics courses, facilitating student understanding and enhancing problem-solving skills through collaborative learning sessions.

#### EXPERIENCE

# Pharmacy Assistant

Oct 2023 - Feb 2024

Osborne Station, WPG

Shoppers Drug Mart

• Data entry using Healthwatch and PHIMS

- · Managed inventory, ordering, and stocking and updated vaccinations specifically COVID and Flushots
- Resolved customer inquiries, concerns, and complaints promptly, maintaining positive relationships.

# TECHNICAL SKILLS

Languages: Java, Python, C/C++, SQL (SQL Server, MySQL, PostgreSQL), JavaScript, HTML/CSS, R

Frameworks: Pygame

Developer Tools: VS Code, Visual Studio, Jupyter Notebook, Microsoft PowerBI, Tableau

Libraries: pandas, NumPy, Matplotlib, TensorFlow, STL (C++)

Other Tools: Excel (VLOOKUP, Conditional Formatting, Pivot Tables, Interactive Dashboards)