

Karim Elbishouty

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Karim Elbishouty

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KarimE92

https://karime92.github.io/Portfolio-Website/



PROFILE

A fresh graduate from the University of Nottingham with a passion for Artificial Intelligence. With a strong background in multiple different programming languages across multiple different fields in computer science, I am looking for a role where I can grow and learn from experienced team members while utilizing my experience from my previous projects.

EDUCATION

University of Nottingham

Bachelor of Science with Honours in Computer Science with Artificial Intelligence

Sep 2020 – Jul 2023

LANGUAGES

English

Fluent



Arabic

Native Speaker



SKILLS

Programming Languages (Python, C, Java, C#, SQL, PL/SQL, HTML, CSS, Javascript, Haskell)

Programming Skills (Machine Learning, Reinforcement Learning, Autonomous Robotic Systems, Debugging and Software Maintenance, Optimization, Algorithms, Data Structures, Web Development)

Tools (Git, Matlab, Visual, Studio Code, Visual Studio, MySQL, Unity, PyGame, VMWare Workstation, Discord API)

Other Skills (Leadership, Communication, Teamwork, Critical Thinking, Problem Solving, Remote Work)

PROFESSIONAL EXPERIENCE

EgabiFSI

Consulting Department Summer Internship Program

- Learned PL/SQL in order to create and manipulate databases.
- Used PL/SQL and virtual machine software to set up a database server using Oracle Linux.
- Proactively worked together in a team to produce desirable results.

Jul 2022 – Aug 2022

7 Al Khalili, Sheraton, Egypt

PROJECTS

Portfolio Website

- Used HTML, CSS, and Javascript to code a website to showcase my portfolio.
- Ensured compatibility between both PC and Mobile versions of the website
- Added a "Contact Me" section which is linked to a Google Sheets document so people can contact me through the website.
- Hosted the website online.

Nov 2023 – Dec 2023

Procedural Generation in Video Games using Machine Learning

- Created an artificial neural network capable of generating levels based on sufficient training data.
- Coded a simple procedural generation method in C# for generating levels and terrain.
- Generated training data by using the simple procedural generation method to continuously generate levels.
- Created a simple two dimensional platformer game in Unity.

Sep 2022 – May 2023

Analysing the Difference in Performance between Reinforcement Learning and Heuristic Solutions to Simple Games

- Created 2 simple games, Snake and Tetris, in Python using PyGame.
- Coded a heuristic agent to solve both Snake and Tetris.
- Used QLearning to code a reinforcement learning agent to solve both Snake and Tetris.
- Compared both agents to one another to discover which is more efficient.

Mar 2023 – May 2023

Tree-Based Discretization for Reinforcement Learning

- Wrote a conference paper on Tree-Based Discretization for Continuous State Spaces for Reinforcement Learning.
- Used the Continuous U-Tree Algorithm as well as the Kolmogorov-Smirnov test to discretize the state spaces for various OpenAI Gym environments.
- Compared the performance of the Continuous U-Tree Algorithm to QLearning and Monte Carlo methods for reinforcement learning.

Oct 2022 – Dec 2022

Chatbot with Emotion Detection

- Collaborated with 5 other programmers to develop a chatbot capable of recognizing the user's emotion throughout a conversation.
- Led weekly meetings to check up on team progress and set realistic goals accordingly.
- Worked in Python to implement chatbot's user responses.

Sep 2021 – Apr 2022