Omar Walid Kamal

Cairo, Egypt | +201111865372 | Omarkamal619@gmail.com | https://www.linkedin.com/in/omarkamal280/

EDUCATION

German University in Cairo **Cairo, Egypt**

Bachelor of Engineering: Computer Engineering GPA : 3.70 / 4.00 *Graduation Date: Jun 2024*

The Egyptian British International School **Cairo, Egypt**

International General Certificate of Secondary Education (IGCSE) *Graduation Date: Jun 2019*

TECHNICAL WORK EXPERIENCE

CyShield **Cairo, Egypt**

Intern *Aug 2023 - Oct 2023*

- Exposure to the AI program tackling subjects like Machine Learning, deep learning using neural networks, reinforcement learning and transformers.
- Collaborated with cross-functional teams to conduct penetration testing on company systems, identifying and remediating critical vulnerabilities.
- Exposure to Cybersecurity program tackling subjects like GRC, Linux, Cysec, Infrastructure and Networks.

C-Holding **Cairo, Egypt**

Product Manager *May 2023 - Aug 2023*

- Developed and executed a comprehensive product roadmap, aligning feature priorities with business goals, resulting in a 20% increase in user engagement.
- Managed cross-functional teams of developers, designers, and marketers to successfully launch new features on schedule and within budget, resulting in a 7% increase in overall revenue.
- Established strong relationships with key clients through regular meetings to gather feedback and address concerns.
- Implemented a database for handling hiring data as well as automating the response mails to 1,000+ canditates using python.

BACHELOR PROJECT

German University in Cairo | A+ **Cairo, Egypt**

Machine Learning Techniques in Cryptanalysis

- Achieved 100% accuracy in deciphering ciphertexts using a feed-forward deep learning model with 1000 plaintext-ciphertext pairs encrypted with the same key.
- Attained an average Bit Accuracy Probability (BAP) of 93% for key prediction over 10 bits with a training dataset of 200,000 entries.
- Extended analysis to the Speck algorithm to assess the effectiveness of neural networks on longer key sizes.

PROJECT EXPERIENCE

Data Science **Cairo, Egypt**

Personal side projects

- Built an RNN model that deals with textual data to generate artist style lyrics using a seed and an artist as the input. Compared the results with a fine-tuned GPT2.
- Led a data science project focused on football match prediction, using web scraping to gather data from various sources and applying Spark for preprocessing. Implemented machine learning algorithms to accurately predict goal scoring outcomes with a mean absolute error of 0.6.
- Utilized Python and OpenCV to develop a robust face recognition system, resulting in an accuracy rate of 90% for facial identification.
- Developed an innovative American Sign Language (ASL) sign translator using deep learning techniques in Python. This translator enables real-time translation of ASL gestures into text with an accuracy rate of 76.6%.

- Designed and deployed a car/pedestrian identifier utilizing computer vision algorithms in Python, contributing to improved safety measures in urban environments. Achieved a detection accuracy rate of 85% for identifying cars and pedestrians, reducing the risk of accidents by providing real-time alerts to drivers.

Arduino Electric Car Prototype   **Cairo, Egypt**

Embedded systems course

- Developed and tested a self-parking car prototype equipped with automatic rain wipers, fuel level indicator, and built-in radio system.

Completed 3D games with integrated AI using Unity and C#.   **Cairo, Egypt**

Game Development course

- Developed and implemented a runner game using Unity and C# as part of university coursework, demonstrating high student engagement metrics.
- Designed and executed a tell-tale game project with consistently positive feedback, showcasing proficiency in Unity and C# game development.
- Created a third-person shooter game as part of university coursework, highlighting advanced gameplay mechanics and technical execution in Unity and C# development.

NON-TECH WORK EXPERIENCE

Celebratory Events   **Cairo, Egypt**

Cairo Zone Leader   *Jan 2020 - Sep 2023*

- Managed and successfully grew a portfolio of 50+ clients.
- Developed and executed strategic marketing plans, resulting in a combined social media following of over 25,000 followers.
- Oversaw project budgets ranging from 70,000 EGP to 2,000,000 EGP for each client, ensuring successful completion and ROI.

TECHNICAL SKILLS

Python | Java | C# | Unity | SQL | NLP | RAG | pySpark | Machine Learning algorithms | Data cleaning and preprocessing | Numpy | Pandas | Scikit-learn | Tensorflow | Matplotlib | Neural Networks | OpenCV | Fundamentals of Generative AI | Web Scraping | Embedded Systems | Arduino | Microsoft Office (Excel, Word, PowerPoint) | Google Sheets

LANGUAGES

Arabic : Native | English : Fluent | German : Intermediate | French : Intermediate