Mr. Aymane Aacha

Reading | London

+447902366407 | aachaaymane@gmail.com | LinkedIn

Higher Education:

MSc Data Science and Advanced Computing University of Reading

September 2024-September 2025

In progress. Selected to act as **Course Representative** of the cohort. Thesis topic: "Vehicle Re-<u>Identification for Visual Surveillance</u>" supervised by Dr. Muhammad Shahzad. Modules:

- o Applied Data Science with Python
- o Data Science Algorithms and Tools
- Mathematics and Statistics for Data Science
- Artificial Intelligence and Machine Learning
- o Big Data and Cloud Computing
- Data Security and Ethics

BSc Computer Science Honours (Artificial Intelligence) Brunel University London

September 2020-June 2023

Graduated with an Upper Second Class Honours Degree. Relevant projects completed:

- A group project where each team member was tasked to develop a game using Java, then integrate these games into one Java application. Designed flowcharts and pseudocode, implemented through the Eclipse workspace, tested with JUnit.
- A group project to read and manipulate 90,000 row long dataset of tweets relating to Brexit.
 Data visualization done through SPSS and data manipulation done using SQL through DB Browser.
- A Scrum-style group project to develop a full stack application using React, Spring Boot, and mySQL.
- A group project to create and reflect upon UX design materials for an interactive digital whiteboard with a focus on accessibility.
- O An individual final-year project to train and use a convolutional neural network model to allow users to classify flower images using the Oxford102 dataset. Achieved using Tensorflow and Keras as well as a Python web-interface library called Gradio. Additionally, tested and collected metrics upon the model such as precision, recall and f-1 score.

Skills:

- <u>Coding Languages</u>:
 - Good understanding of the **Java** language and **Eclipse** workspace
 - Confident working with and querying large databases using SPSS and SQL
 - Good ability in **Python**, especially with the **Tensorflow** and **Keras** libraries
 - Knowledgeable in **Pandas** and **NumPy** for data analysis. Also familiar with **SciPy**.
 - Comfortable using Matplotlib for data visualization.
 - Good understanding of the R language and R Studio IDE
 - Experience in full stack development through **React** and **Spring Boot**
- Operating Systems: Excellent knowledge of **Windows OS**, good knowledge of **macOS** and **Linux** operating systems.
- Version Control: Experience with **Git** version control and **GitHub**
- <u>Software Packages</u>: Advanced knowledge of **Microsoft Office** and **Google Workspace** applications. Particularly comfortable using **Microsoft Excel** for data analysis and visualization.
- <u>Development Methodologies</u>: Experience in **Agile** and **Scrum** methodologies gained in second year group project, as well as traditional **Waterfall** development in the first-year game project.

- <u>Coding Skills</u>: Good understanding of key software engineering concepts including: **Object-oriented** programming, **encapsulation**, **polymorphism**, and **inheritance** achieved through continual engagement in group projects and software development and software engineering modules.
- <u>Language Skills</u>: Native level fluency in **English**, **French** and **Arabic**. Semi-fluency in **Spanish**.

Secondary Education:

American School Dhahran, Dhahran, Saudi Arabia IB Diploma Program

September 2017-June 2020

Completed the IB Diploma Program, where the participant took university-level courses and was expected to pursue many individual and group projects over the course of two years, along with 150 hours of volunteering and extracurricular activities.

Employment History:

Data Analyst Intern AS Distribution, Marrakech

Oct 2023-Dec 2023

Internship at a fresh produce import-export company in Marrakech. During this internship, I assisted in managing the customer, supply and shipment databases through the internal JS web-app; the purchase price of products had to be accurately recorded, along with their sale price, customer details, dates and any other relevant details. Collaborated with team members to ensure precision and timeliness.

Construction Labourer Eiffage, Paris

Aug 2024-Sep 2024

Summer job in Paris working with Eiffage, one of the largest civil engineering construction companies in Europe. Gained hands-on experience with concrete pouring, masonry, demolition, and assembly of structural components. Improved problem-solving abilities by addressing on-site challenges, such as material shortages and layout discrepancies. Demonstrated adaptability by effectively communicating in French and working in a multicultural environment.

Private Tutor Dhahran and London/Reading

Janurary 2021-Present

Provided one-on-one tutoring sessions, tailoring instruction to meet the specific needs of each student while promoting independent learning skills. Provided homework assistance using specific curriculum and materials. Motivated students towards learning and studying to build self-confidence and reduce fear of failure.

Soft Skills:

- <u>Communication and Speaking</u>: Excellent communication skills obtained through the many collaborative projects completed during university and secondary education in the IB Diploma Program. In addition, a comfortable and **confident speaker** obtained through Model UN conference experiences, Consulting Society and as MSc Student Representative.
- <u>Management and Organization</u>: Exceptional leadership and team-planning skills obtained through being team leader for BSc first year group project and Scrum master for BSc second year group project.