Omar Riyaz

Portfolio: omarriyaz.vercel.app Github: github.com/omarriyaz

EDUCATION

University of Bath

Bath, UK

2024 - 2025

Masters of Science Data Science - Exp. Distinction

Courses: Statistics, Machine Learning, Applied Data Science, Bayesian Machine Learning, Reinforcement Learning

Heriot-Watt University

Edinburgh, UK

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Bachelors of Science (Hons.) Computer Science - 2:1

2020 - 2024

Courses: Data Visualization, Conversational Agents, Intelligent Robotics, Machine Learning, Data Structures and Algorithms

Dissertation Project: Development of a Chatbot for Learning Assistance Using NLP and Machine Learning

EXPERIENCE

Automation Anywhere

Dubai, UAE

Software Engineering Intern

Jul 2021 - Sep 2021

- o Java Development: Developed and Integrated Java modules for the Automation 360 cloud platform
- Cloud Migration: Contributed to the migration of 20 on-premises bots to the cloud, improving scalability and reducing maintenance for business processes.
- o Bot Development: Created a custom bot for Heriot-Watt University's student portal, automating exam result notifications and re-sit guidance, streamlining information delivery for students.
- o Quality Assurance: Collaborated with the QA Team to implement testing methods, ensuring adherence to user requirements.

Paramount Computer Systems

Dubai, UAE

Cyber Security Intern

Jun 2023 - Aug 2023

- o Cyber Security: Explored various cyber security frameworks and Microsoft's security solutions, including Azure and Microsoft Defender.
- o Capestone Project: Implemented Conditional Access, cloud security, Data Loss Prevention policies, and Network Security Groups in Azure.

Heriot-Watt University

Edinburgh, UK

Teaching Assistant

Dec 2023 - May 2024

- Python and SQL Assistance: Assisted for the Software Development and Databases courses, guiding students through coding challenges, debugging, and IDE setup for over 80 students.
- o Python Coding Tutor: Tutored at the Code Clinic, a coding support program, offering tailored guidance on various programming issues.

RBC Bluebay

London, UK

Work Experience Program

Jun 2024 - Jun 2024

- o Trading and Portfolio Management: Gained in depth exposure to business operations and strategic decision making by observing multiple teams on active trading floors at the London office of RBC BlueBay.
- o Quant and Software Development Teams: Engaged with Quant teams and Software Developers to learn about developing proprietary software and machine learning models for stock selection.

Clean Blast International

Dubai/Remote

Software Developer

Jul 2024 - Aug 2024

- Python Web App: Developed a custom application to automate the extraction, cleaning and visualization of sales data, streamlining data processing for over 20,000 transactions.
- o Data Visualization: Built an interactive dashboard within the app using Plotly and Matplotlib, displaying key performance indicators to provide real time insights into company performance, boosting their decision making efficiency

Projects

- Song popularity predictor (Machine Learning, TensorFlow, Keras, PyTorch, Pandas, Python): Collaborated on a Machine Learning project to develop a predictive model for song popularity using Spotify data. Achieved 85% accuracy with Neural Networks while cleaning and preparing a dataset of over 10,000 songs. Implemented K-Nearest Neighbors and Decision Trees, optimizing performance and increasing predictive accuracy by 15%
- COVID-19 Vaccination Effects Visualization (D3.js, Javascript, HTML, CSS): Led a data visualization project on a COVID-19 vaccination dataset, ensuring data accuracy for over 50,000 records using Pandas and NumPy. Developed an interactive dashboard with diverse visualizations using HTML, CSS, JavaScript, and D3.js.
- Impact of Narratives on Human-Robot Interaction (NLP, LLM, Python, Kotlin): Led an 8-member team in a research study on the impact of narratives on human-robot interaction using a Furhat robot with an OpenAI LLM, conducting data analysis in Python and developing the virtual environment in Kotlin; the project was recognized for submission to the HAI conference, reflecting its significant contributions to the field.

Honors and Awards

- Research Poster Paper Published in Human-Agent Interaction Conference September, 2024
- Deputy Principals Award for Academic Excellence: Heriot Watt University 2021, 2022, 2023
- Recipient of The Global Leaders Scholarship: University of Bath August, 2024
- Owner of a Music Production YouTube Channel with over 30,000 subscribers
- Produced multiple songs, with over 100,000 streams on all platforms