Amir Mohammadikarbalaei

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Data Scientist
Portfolio
Bath

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SUMMARY

Detail-oriented MSc Data Science student with a proven track record of achieving results. Through participation in Kaggle competitions and projects, I have developed a profound appreciation for the transformative power of data in any business. The dynamic field of data science, demanding adept problem-solving and creative thinking, resonates deeply with me. I am passionate about using AI and machine learning to address real-world problems, aiming to make a positive impact on humanity by harnessing the power of cutting-edge technology. Eager to contribute my skills and knowledge to a forward-thinking organisation that values innovation and offers opportunities for continuous learning and personal growth.

EDUCATION

2026 | 2024

MSc Data Science with professional placement
University of Bath

- Engineered machine learning algorithms, including but not limited to Random Forest and Deep Learning models, from scratch, achieving a deep understanding of their underlying principles.
- Mastered advanced concepts in statistics and probability theory, applying them to optimise machine learning solutions.
- Delivered multiple end-to-end machine learning projects, leveraging best practices in software development and deployment.

2020 | 2017

BEng (Hons) Mechanical Engineering
Newcastle University

- Developed a strong foundation in advanced Statistics and Mathematics, building essential skills for quantitative analysis and data-driven problem-solving.
- Collaborated with diverse, multidisciplinary teams during the MATE ROV Competition, achieving key project milestones and leading Newcastle University's team to its first-ever qualification for this prestigious international competition.

EXPERIENCE

Feb 2024 | Dec 2023

Data Scientist - AI Healthcare Applications
Simplifine, Y Combinator Start-up, San Francisco, California, US

Skills: Python · Machine Learning · Large Language Models · Transformers · Streamlit · Start-up

- Developed an innovative application utilising localised language models (LLMs) to improve healthcare communication for professionals.
- Played a key role in securing Y Combinator funding by delivering a product that significantly optimised healthcare workflows, showcasing substantial value to investors.
- Collaborated with multidisciplinary teams to gather user insights, ensuring the application aligned with user needs and industry standards.

Jan 2024 | Oct 2023

Data Analytics Trainee
Generation UK and Ireland, Leeds, UK

Skills: Python · Data Analytics· ETL · SQL · Power BI · SQL · Data Analysis · Team Leadership · Stakeholder Management

- Performed in-depth analysis of the Olist dataset (Brazilian e-commerce platform) using Power BI and SQL to identify key drivers of customer satisfaction. Created detailed reports and interactive dashboards, presenting actionable insights and recommendations.
- Led two project teams, guiding them through interim and final projects, fostering collaboration and deep understanding, resulting in full marks for both teams.
- Collaborated with the instructor to mentor and teach less-experienced learners, providing guidance on essential data analytics concepts and best practices.

Oct 2023 | Sep2020

Independent Data Scientist
https://amirmohammadikarbalaei.github.io/DataScience.github.io/

Skills: Python · Leadership · Power BI · SQL · Database Management · Microsoft Excel

- Applied time series forecasting and classification techniques to detect and analyse EEG biopotential signals.
- Utilised unsupervised learning to cluster retail customers based on purchasing behaviour, enabling effective targeted marketing strategies.
- Implemented Q-learning to train an autonomous agent in OpenAI's Gym environment simulations.
- Competed in Kaggle's "Detecting Sleep State" competition, conducting exploratory data analysis and feature engineering to develop and train robust classification models.