Amir Mohammadikarbalaei

Data Scientist
Leeds

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SUMMARY

Detail-oriented Mechanical Engineering graduate with a proven track record of achieving results. Through participation in Kaggle competitions and personal projects, I have developed a profound appreciation for the transformative power of data in any business. The dynamic and intricate field of data science, demanding adept problem-solving and creative thinking, resonates deeply with me. I am sincerely 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.

EXPERIENCE

Data Scientist - AI Healthcare Applications
Simplifine (YC S24), San Francisco, California, US

Feb 2024 | Dec 2023

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

- I had the exciting opportunity to work in a dynamic and fast-paced start-up environment, funded by the prestigious Y Combinator. My role focused on developing cutting-edge localised language models (LLMs) specifically designed for healthcare professionals.
- As the main developer for our windows application, I played a crucial role in developing a product that significantly improved documentation, diagnosis, and patient communication processes for doctors. This product played a key role in helping Simplifine secure Y Combinator funding and positioned the start-up for future success.

Data Analytics Trainee
Generation UK and Ireland, Leeds, UK

Jan 2024 | Oct 2023

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

- Analysed the Olist dataset (Brazilian e-commerce platform) using Power BI and SQL, identifying factors impacting customer satisfaction and creating detailed reports and dashboards. Presented insights with actionable recommendations.
- Led two teams through interim and final projects, achieving 100% scores by fostering collaboration and comprehensive understanding among team members.
- Collaborated with the instructor to teach and mentor less-experienced learners, providing guidance on key data analytics concepts.

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

2023 | 2020

Skills: Python · Community Detection · Algorithm Design · Machine Learning · Apache Spark · SQL · Research

- Applied time series forecasting and classification to detect and analyse EEG biopotential signals.
- Used unsupervised learning to cluster retail customers based on purchasing behaviour, supporting targeted marketing strategies.
- Implemented Q-learning to train an autonomous agent in Gym environment games.
- Competed in Kaggle's "Detecting Sleep State" competition by performing exploratory data analysis and feature engineering to train classification models.

Student Mechanical Engineer
AVID Technology Limited, Cramlington, UK

Sep 2019 | Jul 2019

Skills: Python · Software Engineering · Operating systems · SQL

- Led the ThermoFluid group in incorporating software solutions to increase efficiency.
- Conducted a software review of OpenModelica and Xcos Scilab, two powerful tools for modelling and simulating dynamic systems.
- Enhanced product longevity by flagging a significant manufacturing concern regarding the surface finish of the impeller.
- Gained valuable experience in project and product life cycle management.

EDUCATION

2024-2026
- MSc Data Science
  University of Bath

2017-2020
- BEng (Hons) Mechanical Engineering
  Newcastle University
  - Went through advanced levels of Statistics and Mathematics, acquiring a strong foundation in quantitative analysis.
  - Collaborated seamlessly within diverse, multidisciplinary teams during the MATE ROV Competition, resulting in the attainment of critical project milestones. This effort culminated in a historic achievement, marking the first-ever qualification of a team from Newcastle University for this esteemed international competition.