AHMAD AMMARI

Azure AI Engineer
Fabric Analytics Engineer

Lead Data Scientist

Objective

Experienced data scientist, skilled in advanced analytics, AI, and machine learning, seeking Lead Data Scientist role to leverage my expertise in predictive modeling, data strategy, and innovative AI solutions to drive impactful business outcomes.

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✉️ ammariect@gmail.com

🏠 Hamlyn Heights, Geelong, VIC

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My Google Scholar Profile

My Online Profile and AI Assistant

EXPERTISE

- Data Analytics & Visualizations
- Azure AI & Fabric Engineer
- Python & SQL Programming
- Machine & Deep Learning
- LLMs, RAG, & Vector DBs
- Big Data (Hadoop & Spark)

Language

- English (advanced)
- Arabic (native)
- French (basic)

Summary of Qualifications

- 12 years of experience in data science, software engineering, and advanced analytics with proven ability to collect, analyze, and interpret complex data to uncover insights and trends.
- Azure AI engineer, Fabric Analytics Engineer, Oracle certified DB associate, Sun certified Java programmer
- Strong expertise in generative AI, pattern recognition, and machine learning applications
- Expertise in statistical analysis, predictive modeling, machine learning, data mining, data visualization, and AI/ML to develop data products.
- Proficient in Python, R, SQL, NoSQL, Hadoop, Spark, TensorFlow, PyTorch, scikit-learn, Pandas, Matplotlib, AWS, GCP, Azure.
- 6+ years of experience teaching information technology, computer science, data science, and advanced analytics topics in higher education

Higher Education

University of Bradford, West Yorkshire, UK
PhD in Computing and Mathematics
2005-2010

- Developed novel techniques in web data mining, text mining and natural language processing.
- Innovated intelligent information retrieval and recommendation systems.

Arab Academy for Banking and Financial Sciences, Amman, Jordan
MSc in Computer Information Systems
2001-2004

- Specialized in AI, machine learning, application development and electronic commerce.
- Achieved excellent overall grade demonstrating strong academic performance.

Publications

- 14 peer-reviewed publications in leading journals and conferences related to artificial intelligence, machine learning, data mining, and natural language processing.
- Full publication list available upon request.

Data Scientist & NLP Developer
University of Melbourne, Melbourne, Australia
Oct 2022 - Sep 2023

- Developed and deployed NLP models on AWS SageMaker for NDIS AI products, including behavioral support plan analysis and learning management systems.
- Applied and optimized NLP models using Python, NLTK, Gensim, TensorFlow, Flair, SentenceTransformers, SetFit, Argilla, SpaCy-LLM, and other libraries and techniques to create innovative natural language processing capabilities.
- Utilized and fine-tuned cutting-edge LLMs and Transformer models from Azure OpenAI and Meta Llama for text generation, scoring, and synthetic data creation.
- Built vector stores with Qdrant for semantic similarity detection & retrieval augmented generation.

Senior Data Scientist
RACV, Melbourne, Australia
Apr 2021 - Oct 2022

- Led the migration of SAS ML models to a cloud-based Azure environment, leveraging Python, R, and Azure Machine Learning, resulting in a 15% reduction in member churn and a 20% increase in cross-sell.
- Developed insurance propensity models using Python and scikit-learn, achieving a 22% reduction in member churn and over $3 million in annual campaign revenue increase.
- Built predictive models to reduce member churn and increase cross-sell of insurance products, resulting in measurable business impact.
- Applied data science to personalize insurance products through customer segmentation models.

Data Scientist
Deakin University, Geelong, Australia
Jul 2018 - Apr 2021

- Architected scalable ETL pipelines with Pyspark, Hive, Kafka processing 100+ GB of learning data.
- Built interactive Dash and Plotly dashboards providing self-serve analytics on student engagement.
- Led migration of reporting systems to PySpark and Hadoop HDFS reducing job time from hrs to mins.
- Spearheaded adoption of Jupyter Voila for prototyping models and metrics used by decision makers.
- Key contributor to high-visibility Learning Analytics project applying Big Data to understand learning.
- Prototyped AI and machine learning models enhancing the Deakin Genie student-assistant chatbot.
- Analyzed, trained, and deployed predictive models of student attrition using Spark and AWS SageMaker.
- Implemented a students discussion topic recommender system using Spark, Kafka, GPUs, and Docker.

Data Scientist
Tribal Group, Geelong, Australia
Sep 2017 - Jan 2018

- Developed student withdrawal and progression predictive models for academic institutions.
- Built data pipelines to ingest, analyze, train, evaluate, and deploy student, faculty, course, and module data for learning analytics.
- Created Docker-based anonymization, testing, and quality assurance data models.

NLP Engineer
Hello Soda, Manchester, UK
Oct 2016 - Sep 2017

- Applied NLP and machine learning techniques to extract insights from social media data.
- Developed models using Python, TensorFlow, and Docker to predict demographic attributes.

Academic Work History

Academic Award Teacher
Kaplan Higher Education (Adelaide Uni),
Melbourne, Australia
Feb 2024 - **Present**

Advanced Analytics Course Facilitator
Mentem UNSW, Remote, Australia
Dec 2023 - **Present**

Data Analytics & Visualization Instructor
edX Boot Camps, Australia
May 2024 - Nov 2024

Research Assistant
University of Wolverhampton, West Midlands, UK
Feb 2016 - Oct 2016

IT Class Teacher
Higher Colleges of Technology, Dubai, UAE
Feb 2012 - Feb 2014

Research Fellow in User & Community Modelling
University of Leeds, West Yorkshire, UK
Feb 2011 - Feb 2012

Java Demonstrator
University of Bradford, Bradford, UK
Jan 2010 - Jul 2010

IT Lecturer & Faculty Coordinator
Emirates College of Technology, Abu Dhabi, UAE
May 2005 - Jun 2008

Links to My Professional Certificates

- Microsoft Certified Fabric Analytics Engineer Associate
- Microsoft Certified Azure AI Engineer Associate
- Data Engineering Zoomcamp
- Data Science Specialization
- Designing and Implementing a Microsoft Azure AI Solution
- AI for Medicine Specialization
- Neural Networks and Deep Learning
- Machine Learning, Stanford University
- Machine Learning Operations (ML Ops) Zoomcamp

Links to My Academic Contributions

- Participation in International Conference in Higher Education.
- Instructional Skills Workshop.
- Oral Presentation Skills for Technical Professionals.
- Organization and Presentation of Applied Research Skills Workshop.
- Organization of the CTIT 2013 Conference.
- Development of New Academic Program in e-Commerce and Marketing.

Links to My Work Samples

Building Ethical Machine Learning Systems
A Practical Guide to Protecting Privacy, Ensuring Fairness, and Building Responsible AI Systems

Designing Controlled Experiments to Draw Causal Conclusions
An interactive lecture on designing controlled experiments and avoiding common pitfalls. Demonstrated ability to explain complex analytics concepts clearly and engagingly

PowerBI Dashboard Demo
A short demonstrational video built using PowerBI, Large Language Models, Text-to-Speech, and ScreenPal

E-Commerce and Marketing Program Presentation
Presented to the UAE Higher Education Ministry for Program Accreditation and Approval

Step-by-Step Excel Skills Building Assignment
Guides students through hands-on application of Excel formulas, functions and formatting to build real-world business analysis skills.

Distributed Data Mining for User Sensemaking in Online Collaborative Spaces
Unlocking Insights from Online Collaboration: My research on utilizing distributed data mining techniques to help users make sense of information in online collaborative platforms.

YouTube Services - How to Filter Out the Noise in Social Media
A video presentation showcasing how I used YouTube data, text mining, and machine learning to derive user-group profiles from social media for the ImREAL Project, a research initiative on immersive learning environments.

Blog Clustering and Community Discovery in the Blogosphere - An Overview
Mapping the Blogosphere: My research on utilizing machine learning for blog clustering and unveiling online communities.

MLOps Project - Passenger Ride Cost Estimation in Washington DC
Demonstrating my skills in MLOps tools, such as MLFlow, Prefect, Grafana, Evidently, CICD, and AWS.

References

Reference 1:

Reference Relationship: Former manager at the University of Melbourne
Referee name: Michael Kirley
Referee job title: Professor in the School of Computing and Information Systems
Referee address: Room 8.318, Melbourne Connect, 700 Swanston Street, Carlton
Referee contact number: +61383441401
Referee Email: mkirley@unimelb.edu.au
LinkedIn Profile: https://au.linkedin.com/in/michael-kirley-765621109

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Reference 2:

Reference Relationship: Former manager at Deakin University
Referee name: Kayne Richens
Referee job title: Engineering Manager at Linktree
Referee address: Collingwood HQ 37 Islington St, Collingwood, Victoria.
Referee contact number: +61438947160
Referee Email: kayne.richens@gmail.com
LinkedIn Profile: https://www.linkedin.com/in/kaynerichens/