AHMAD AMMARI

Senior AI Engineer

⧉ My Online Portfolio

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Hamlyn Heights, Geelong, VIC

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Objective

To leverage my extensive expertise in NLP, generative AI, and applied machine learning to empower companies in building useful, cutting-edge, and ethical AI and data products that transform people experiences worldwide

EXPERTISE

ML modeling in R & Python

ETL and Feature Engineering

SQL for data ingestion & transformation

Big Data, Cloud, and ML Ops

Artificial Intelligence

Natural Language Processing

Language

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

Summary of Qualifications

- 10 years of experience in data science and advanced analytics with proven ability to collect, analyze, and interpret complex data to uncover insights and trends.
- 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.
- Expertise in generative AI and large language models.
- Microsoft Certified Azure AI Engineer Associate
- Experience leveraging cloud technologies and applying ML models in real-world business contexts to drive measurable impact.
- Strong communication and collaboration skills to effectively present findings and partner with stakeholders across business units.

Education

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

Research focused on developing novel techniques in web data mining, text mining and natural language processing to support 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

⧉My Google Scholar Profile

- 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.

Advanced Analytics Course Facilitator - Part Time
Curio Group, Melbourne, Australia
Dec 2023 - Present

- Design and lead interactive advanced analytics courses with live sessions, comprehensive materials, and personalized feedback.
- Guide students through data analysis concepts and sought-after analytics skills using a learner-focused approach.
- Create course structures that promote peer collaboration and immediate clarification.
- Maintain high academic standards while fostering an inclusive space for diverse learners to enhance their analytics skills.
- Incorporate teaching content related to data science and machine learning, including Python, statistical analysis, and data analysis.

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

- Developed and deployed NLP models on AWS SageMaker for NDIS AI product, including behavioral support plan analysis and learning management system.
- 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 capabilities.
- Utilized and fine-tuned state-of-the-art LLMs and Transformer models from Azure OpenAI and other sources for text generation, scoring, and synthetic data creation.
- Built vector stores with Qdrant for semantic similarity detection.

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

- Migrated machine learning models from SAS to Python and R on Azure ML Studio.
- Built predictive models reducing member churn and increasing cross-sell.
- Applied data science to personalize insurance products.

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

- Prototyped AI and machine learning models enhancing the Genie chatbot.
- Analyzed, trained, and deployed predictive models of student attrition using AWS SageMaker.
- Implemented a discussion topic recommender system using Spark and Kafka.

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.

Research Assistant - Social Media Analytics

University of Wolverhampton, West Midlands, UK

Feb 2016 - Dec 2016

- Published extensively on pioneering analytical investigations into novel transport big data architectures, substantially advancing state-of-the-art in NLP-driven social media analytics for intelligent traffic forecasting engines.
- Pioneered innovative graph-based models for aspect-level sentiment analysis on transportation tweets, achieving state-of-the-art performance for fine-grained opinion mining.
- Created novel semi-supervised algorithms combining transport ontology knowledge with deep convolutional neural networks to substantially improve traffic incident detection.
- Designed inventive ensemble approaches fusing multimodal social media signals with multivariate sensor data to enhance predictive power of transport forecasting engines.

Senior Data Scientist

eRevalue, London, UK

Feb 2015 - Sep 2015

- Analyzed social media data to identify insights and support corporate sustainability systems.
- Led text analytics projects that uncovered emerging sustainability topics from Twitter.
- Built data products that stream, process, and analyze real-time social media content.

Data Analyst

Peerius, London, UK

July 2010 - Dec 2010

- Built, tested, and analyzed large datasets using TSQL, DMX to create product recommendation models.
- Managed data extraction, transformation, loading, and cleansing processes.
- Communicated data insights to improve personalized recommendation algorithms.

Links to Professional Certificates

- Microsoft Certified Azure AI Engineer Associate
- 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 Work Samples

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

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

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