

USAMA ABID

MACHINE LEARNING ENGINEER 📍 MELBOURNE, AUSTRALIA 📞 +61480452060

◦ DETAILS ◦

Melbourne
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◦ LINKS ◦

[LinkedIn](#)

[GitHub](#)

◦ SKILLS ◦

Deep Learning
Machine Learning
Natural Language Processing
LLM's fine tuning (Gemma,
LLama 2, BERT etc)
Computer Vision
object detection, image
segmentation
object tracking
Rest API's
ML Ops
CI/CD Pipelines
Jenkins
GitHub Actions
Clouds (AWS, Azure, GCP)
Docker
GIT
Agile project Management
LINUX
Databases, SQL
Chatbot development



PROFILE

Innovative Machine Learning Engineer with a proven track record of problem-solving and developing AI applications and systems in a beneficial way. With a strong commitment to collaboration and a positive team-oriented mindset, I strive to leverage my knowledge and expertise to achieve optimal engineering results.



EMPLOYMENT HISTORY

Machine Learning Engineer at Mescada, Melbourne

November 2023 — Present

- Develop and implement machine learning models to solve complex business problems.
- Collaborate with cross-functional teams to integrate AI solutions into existing systems.
- Analyze large datasets to extract meaningful insights and inform decision-making.
- Optimize machine learning algorithms for performance and scalability.
- Handle the deployment of models, including the ML Ops life cycle, on cloud platforms such as AWS, Azure, GCP, and Digital Ocean.
- Build REST API's for model deployment and integration.
- Develop CI/CD pipelines to automate and streamline the deployment process.
- Document processes and methodologies to ensure reproducible and knowledge sharing.

Data Scientist at Novum Genesis Technologies, Remote

January 2022 — November 2023

- Led and executed various machine learning projects, delivering high-quality models and solutions.
- Developed computer vision (CV) projects, including image classification, object detection, and image segmentation.
- Implemented Optical Character Recognition (OCR) projects to extract and digitize text from images and documents.
- Built Natural Language Processing (NLP) projects, such as text classification, NER, Topic Modeling, and language modeling.
- Collaborated with cross-functional teams to integrate AI solutions into business operations.
- Conducted data analysis and preprocessing to ensure high-quality input for model training.
- Optimized machine learning models for performance, accuracy, and scalability.

Data Scientist at PriceOye, Islamabad

June 2021 — December 2021

- Performed extensive data analysis and statistical analysis to uncover trends, patterns, and insights from large datasets.
- Developed and optimized recommendation systems to provide personalized user experiences.



EDUCATION



Masters of Data Science, La Trobe University , Melbourne

November 2022 — May 2024



Bachelors of Computer Science, Comsats University Islamabad, Islamabad

September 2017 — June 2021



PROJECTS



QC(Quality Control) Tests classification

- Developed a solution to classify quality control tests for a specific brand of paint as passed or failed.
- Utilized an LSTM model to handle the time series data involved in the tests.
- Improved the accuracy of quality control processes by effectively identifying failed tests.
- Enhanced the reliability and efficiency of the paint quality assurance system.



Verification System using OCR

- Developed an API to extract data from images of ID cards, passports, and driving licenses.
- Built an OCR system using an OCR engine, Flask, and Docker.
- Deployed the project on a Hetzner Linux server for robust and scalable performance.
- Enhanced data extraction accuracy and streamlined document processing.



Chatbot using LLM

- Developed a domain-specific chatbot using the LLama 7B model for specialized interactions.
- Implemented LoRA and QLoRA techniques to enhance the model's performance and efficiency.
- Trained the LLama 7B model to understand and respond accurately to domain-specific queries.
- Integrated the chatbot into various platforms to provide targeted and effective user support.
- Continuously improved the chatbot through iterative training and fine-tuning.



Recommender System

- This project aim was to recommend beer to according customer previous beer buying experience.I trained machine Learning to model for this project.



Real time Face Recognition system

- This project aim was detect faces in real time. I used open-CV and TensorFlow for image processing and trained Deep Learning model on actors and friends image data set.



COURSES



Machine learning with python, IBM



Introduction to Deep Learning & Neural Networks with Keras, IBM



Neural Networks and Deep Learning, deeplearning.ai



Convolutional Neural Networks in TensorFlow, deeplearning.ai