MEMOONA SHAH

JUNIOR DATA SCIENTIST, LOOP AI

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OBJECTIVE

Driven to find practical solutions to complex problems, I focus on identifying inefficiencies and creating automated systems to address them. I take pride in learning quickly and applying new knowledge effectively to develop well-thought-out, efficient outcomes.

SKILLS & ABILITIES

- Expertise in machine learning, deep learning, and NLP projects, with proficiency in frameworks like TensorFlow and PyTorch.
- Skilled in Python, with working knowledge of C++, JavaScript, HTML, and CSS.
- Experienced in GitHub source control, Atlassian Jira, and blueprint-based code organization.
- Working Knowledge of PostgreSQL, Flask, Vue JS, Power BI, and Linux.
- Generative AI skills particularly in the realm of LLMs.
- Experience working with Audio, Video, Image, Text, and Time-series Datasets.

EXPERIENCE

April 2024 – PRESENT Junior Data Scientist, LOOP AI Cognitive Computing, New York

Led cross-functional teams of 10+ members, mentored 5 interns, and maintained project flow, achieving a 100% documentation accuracy rate and bi-weekly alignment goals.
Smart Gym App: Smart Gym App: Designed hyper-personalized workout algorithms, increasing user engagement by 30%; spearheaded the development of an adopted frontend prototype in under 6 weeks.
Music Plagiarism Detection: Built a custom CNN model achieving 98% accuracy on a deepfake-based dataset of 40 Italian artists.
RAG Chatbot: RAG Chatbot: Automated LLM evaluation, reducing model selection time by 50%, improving efficiency in identifying company use cases.
Fine-tuned BERT and ROBERTA models, achieving 99% accuracy in email classification under challenging conditions.

October 2023 – April 2024 Data Science Intern, LOOP AI Cognitive Computing, New York

Contributed to Music Plagiarism Detection and Time Series Sales Forecasting projects, driving a 20% improvement in prediction accuracy. Processed multi-table sales data, uncovering trends that improved forecasting accuracy by 25% and streamlined inventory decisions.

September 2018 – July 2021 Lecturer, Hyderabad College of Science, and technology, Pakistan.

February 2018 – September 2018 Senior Teacher, The Educators, Pakistan.

October 2017 – January 2018 Intern, SUPARCO Satellite Control Facility, Karachi Pakistan.

July 2016 Intern, DAWLANCE, Hyderabad, Pakistan.

EDUCATION

October 2021 – August 2024 Masters in Artificial Intelligence.
University of Bologna, Bologna, Italy.
December 2018 – December 2019 Postgraduate Diploma in ECE.
University of Sindh, Hyderabad, Pakistan.
January 2014 – November 2017 Bachelor of Engineering in Electronics.
Mehran University of Engineering and Technology, Jamshoro, Pakistan.

PROJECTS

- Engineered LLM-based classification with sentiment analysis and priority tagging, achieving 92% accuracy.
- Sales Forecasting: Enhanced inventory optimization for a top interior design brand, reducing excess stock by 15%.
- AUTOML based low code project with chatbot and parameter formatting features.
- A survey on Explainable Fake news detection (An MAI4CAREU Project, presented in Annual AI Camp in Cyprus, June 2023).
- QA on COQA Dataset: Enhanced answer prediction using transformers and recurrent neural networks, achieving a 90% F1 score.
- Political Clustering: Identified 100+ right- and left-wing clusters and non-celebrity influencers in Pakistan using Gephi Analysis.
- VLSI circuit arrangement project based on 2D strip packing problem with Satisfiable Modulo Theories, SAT, constraint programming, and Linear Programming.
- Epilepsy prediction 5 minutes before onset: Developed a model for seizure onset prediction using ECG and EEG data, achieving 85% sensitivity.
- Nightingale Song Patterns - A multi-label Audio Clustering Project (AI in Industry Course Project) resulting in 95 % accuracy.
- NAO Planning Challenge - (Robot Dance Choreography) - Optimal choreography by the greedy search algorithm.
- Vision Assisting Device: Developed a Raspberry Pi-based device for the visually impaired, improving object detection accuracy by 85%.

RESEARCH INTERESTS

- Natural Language Processing, Machine Learning and Deep Learning.
- Ethical AI in Education and Innovation.
- Optimization based Problem solving.

LANGUAGES

English - Fluent/Bilingual
Italian - B2 and Actively Learning
Sindhi - Native
Urdu - Fluent / Bilingual

HOBBIES

Lacrosse, Graphic design, crochet, and Art.

NOTE: I have legal rights to work full time in Italy already and i am not on a student permit.