AMIR MOHAMMADIAN

DATA SCIENTIST, MACHINE LEARNING SPECIALIST

SUMMARY

As a dedicated Data Scientist, I bring a robust analytical toolkit combined with a passion for solving complex problems using data-driven insights. My technical proficiency spans Python, TensorFlow, PyTorch, and various other machine-learning libraries, including extensive experience with large language models (LLMs). I excel in both the healthcare and technology sectors, adept at translating business challenges into actionable data strategies. I optimize processes through advanced analytics and machine learning models, deeply committed to innovative solutions and continuous learning. My goal is to leverage data to drive successful outcomes in dynamic environments.

EXPERIENCE

May 2023 – JUL 2024 SCALE AI | US. SAN FRANCISCO | REMOTE

Data Scientist

- Annotated data to train and optimize large language models (LLMs).
- Developed prompts to enhance LLM performance.

May 2022 - May 2023

AIGOT | ITALY. PISA | REMOTE

Data Scientist

- · Developed machine learning models to predict stress levels accurately.
- Built APIs and a smartwatch application to collect data directly from wearables.
- Handled data preprocessing and feature extraction to improve model reliability.
- Integrated ChatGPT API to optimize user task descriptions and timing.

SEP 2019 – APR 2022 FREELANCER | REMOTE

Data Scientist

- ECG Analysis Project
 - Preprocessed ECG signals to prepare for machine learning analysis.
 - Applied multiple filters to the ECG signals to extract key features, enhancing model accuracy.
 - Created structured dataframes from processed signals to feed into predictive models.
 - Developed and tuned RNN and CNN models to classify and predict heart rate abnormalities.
- Speech Recognition Project
 - Developed an LSTM model for speech recognition, leveraging the Google word database.
 - Preprocessed audio files to extract clear pronunciations of words.
 - Fed processed audio data into the LSTM model to train it on voice recognition.
- Cryptocurrency Trading Bot Project
 - Developed a trading bot using the Binance API to access real-time cryptocurrency market data.
 - Deployed the bot on Telegram, enabling users to interact with it directly for trading.
 - Created several technical indicators and defined triggers for automatic buying and selling decisions.

• Photo Generation Project

- Developed a GAN model to generate realistic photos from a structured database.
- Enhanced training data volume and diversity using an autoencoder, improving the model's accuracy and performance.

• Structure from Motion Project

- Utilized OpenCV to extract image descriptors from multiple photographs of objects taken at varying angles.
- Applied the extracted descriptors to construct accurate 3D models of the objects using the COLMAP application.

Lung Cancer Detection Project

- Developed a Convolutional Neural Network (CNN) model to detect lung cancer from MRI images.
- Preprocessed MRI images to extract relevant features and structured these into a dataframe suitable for model training.
- The model successfully classified images, determining the presence or absence of lung cancer.

EDUCATION

2018 - 2022	ISLAMIC AZAD UNIVERSITY
	Bachelor of Computer Science

CERTIFICATES

2023 - 2024	PROFESSIONAL CERTIFICATE IN DATA SCIENCE

IBM, Coursera

SKILLS

• Technical Skills:

- Advanced Machine Learning Techniques: Deep learning, reinforcement learning, and unsupervised learning methods.
- **Big Data Technologies:** Familiarity with Hadoop, Spark, and Kafka for handling large-scale data processing.
- **Cloud Platforms:** Proficient in using AWS, Google Cloud, and Azure for deploying models and managing cloud resources.
- Data Visualization: Skilled in using tools like Tableau, Power Bl, and Matplotlib to create insightful visualizations.
- **Statistical Analysis:** Strong background in statistical methods that inform data-driven decision making.

• Soft Skills:

- Problem Solving: Strong analytical thinking and problem-solving skills.
- Team Collaboration: Proven ability to work effectively in diverse teams.
- Adaptability: Quick learner with the ability to adapt to new technologies and methodologies.

LANGUAGES

- English: Fluent
- Azerbaijani: Native
- Persian: Native
- Turkish: Fluent