Yuval Mehta

AI/ML Engineer — Data-Driven Decision Maker — Impact-Focused Innovator

Education

NMIMS - Mukesh Patel School of Technology, Management and Engineering

June 2025

Bachelor of Technology in Computer Engineering — CGPA: 3.85/4

Mumbai, India

Experience

xLM - Continuous Intelligence

January 2025 - May 2025

AI/ML Intern

Mumbai, Maharashtra

• Optimizing AI-driven automation and machine learning models for improved performance.

IEEE SPS Student Chapter, IIT Kharagpur (Remote)

July 2024 - May 2025

Kharagpur, West Bengal

Machine Learning Intern

- \bullet Conducted experiments with auto-encoders and GNN, boosting video processing by 30%.
- Optimized hyper-parameters, resulting in a 20% increase in model accuracy and efficiency

JM Financial Ltd

July 2024 – November 2024

Machine Learning / Data Science Intern

Mumbai, Maharashtra

- Automated KYC processes using computer vision and deep learning, cutting processing time by 40%.
- Developed OCR solutions to enhance document verification efficiency by 30%.
- Analyzed large data to derive actionable insights, influencing strategic decisions and operational efficiency by 15%.

Kenmark ITAN Solutions

December 2022 – April 2023

Backend Developer Intern

Mumbai, Maharashtra

- Engineered robust APIs that boosted integration efficiency by 30% across multiple platforms.
- Implemented comprehensive QA protocols, enhancing overall system reliability by 20%.
- Revamped SQL and MySQL databases, significantly cutting query response times by 15%.

Projects

AQI and Molecule Prediction (Ongoing) | Python, PyTorch, MLFlow, GCP

- * Building a ViT-based model to predict AQI and molecules from satellite and street view images.
- * Optimizing accuracy and scalability with advanced image processing and cloud training.

Verbal-Vision | Python, PyTorch, MLflow, TorchServe, Docker, FastAPI

- * Designed a lip reading model achieving 87% accuracy in character prediction from video.
- * Deployed the model using TorchServe, improving inference speed and request handling by 25%
- * Optimized model performance through **MLflow**, reducing training time by 15%.

Image-Lingo | Python, PyTorch, MLflow, TorchServe, Docker, AWS

- * Crafted an image captioning model with an attention mechanism, achieving 91% accuracy in generation.
- * Leveraged MLOps practices using MLflow for experiment tracking, enhancing model performance by 20%.

Outreach-Ace | Python, Langchain, Chroma DB, LLaMA (LLM), Streamlit

- * Automated 20+ cold emails and skill gap analyses using a Gen-AI model, enhancing outreach efficiency.
- * Created a Streamlit interface for resume uploads and job detail extraction, increasing engagement by 30%.

Urban-Echo | Python, PyTorch, MLflow, Docker, AWS

- * Engineered a sound classification model by preprocessing over 8,000 audio samples to extract vital features.
- * Tracked performance metrics with MLflow, optimizing training processes and enhancing model accuracy by 25%.

Technical Skills

Programming Languages: Python, JavaScript, SQL, C, C++, Java

Libraries: Scikit-learn, NumPy, Pandas, Matplotlib, OpenCV, NLTK, SpaCy, SciPy, Transformers

Frameworks: PyTorch, TensorFlow, Keras, Langchain, MLFlow, Django, Flask, FastAPI, Express.js, CrewAI

Databases: MySQL, PostgreSQL, SQLite, Oracle, MongoDB, ChromaDB, Redis, Neo4j

Tools: VS Code, Jupyter, Kaggle, Git, GitHub, Power BI, DVC, Docker

Cloud Platforms: AWS, GCP

Achievements

Achieved **274th out of 74,824 participants** (Top 1%) in the Amazon ML Challenge 2024, with a team of 3-4 members. Published a paper at IEEE APCIT 2024: *Examining ML Approaches for Early Diabetes Prediction*.