

MOHAMMED AJZEL

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PROFESSIONAL SUMMARY

AI/ML & Data Science Engineer and **Oracle Certified Generative AI Professional** with expertise in **machine learning, NLP, data analytics, and Generative AI**. Skilled in **Python, PyTorch, scikit-learn, statistical modeling, feature engineering, data preprocessing, model optimization, and real-time inference**. Experienced in building **end-to-end ML pipelines, analytical dashboards, vector search (FAISS), and LLM-powered applications**, delivering **high-accuracy, production-ready AI solutions** aligned with modern **Data Science, AI Engineering, Cloud, and Analytics** standards.

EXPERIENCE

IBM

May 2025 - July 2025

AI, ML and Data Science Intern (Hybrid)

- Built and deployed a Flask-based ML model (Random Forest) achieving **92% R-2 accuracy** on 1,000+ data points for energy consumption prediction.
- Developed real-time APIs and a dashboard with Chart.js, enabling **100+ predictions/sec** and reducing manual analysis time by **40%**.
- Automated model retraining with user-uploaded datasets, improving forecast adaptability by **30%**.
- Ensured solution scalability with SQLite-backed storage and **95%+ uptime** during testing.

Domino's

Sep 2022 – Dec 2023

Inventory Data Analyst

- Maintained **95%+ inventory accuracy** across daily stock for **100+ orders**, cutting discrepancies by **15%**.
- Streamlined ordering cycles, reducing ingredient waste by **20%** and disposal costs.
- Performed regular stock audits, improving turnover rate by **12%**.
- Forecasted peak demand with teams, ensuring **98% zero stock-outs** during high-volume periods.

PROJECTS

Deepfake Image Detection

(CNN, PyTorch, Flask, Docker)

- Engineered and trained a **PyTorch CNN**, achieving **92% validation accuracy** with **<50ms inference latency**.
- Implemented **data preprocessing & augmentation** (resize, normalization), reducing overfitting by **15%**.
- Deployed a **real-time Flask web app** with confidence scoring, serving **100+ users** and containerized via **Docker**.

Fake News Detector

(Pandas, Scikit-learn, NLTK)

- Built NLP pipeline with **TF-IDF** and **Passive Aggressive Classifier**, achieving **93% accuracy** on 40K+ news articles.
- Optimized text preprocessing (stop-word removal, normalization), improving **precision/recall** in fake news classification.
- Deployed model via **Flask web app** for real-time inference with **<1s latency**, enabling scalable user interaction.

AI Document Searchbot

(Streamlit, LangChain, FAISS, Google Gemini, HuggingFace MiniLM)

- Built an **AI-powered Document SearchBot** using **Streamlit, LangChain, and FAISS**, enabling users to upload and query **10+ PDFs (50MB)** with semantic search in **<1.5s**.
- Implemented **text chunking** (1,000 chars, 20% overlap) and dual embeddings: **Google Gemini** (cloud) & **HuggingFace MiniLM** (offline).
- Achieved **85–90% accuracy** in **conversational QA** with **source context** and an interactive **Streamlit UI**.

Smart Energy Predictor

(Pandas, Flask, Matplotlib)

- Built and deployed a Flask-based Random Forest ML model with **92% R-2 accuracy** on 1,000+ energy data points.
- Developed real-time REST APIs and Chart.js dashboard, enabling **100+ predictions/sec** and cutting analysis time by **40%**.
- Optimized scalability with SQLite storage, ensuring **95%+ uptime**.

Voice-to-Voice Translation

(HTML, Translation APIs, JavaScript)

- Built real-time speech-to-speech translation app integrating **ASR, NMT, and TTS** across 11 languages.
- Achieved **90%+ transcription accuracy** and reduced translation latency by **40%**.
- Natural speech output (TTS) that delivers translated text back as clear, human-like voice.

TECHNICAL SKILLS

Programming Languages: Python,C++,Java,SQL,HTML,JavaScript
Tools: Pandas, NumPy, scikit-learn, PyTorch, TensorFlow, Flask, Tableau, Power BI, Git, Jupyter Notebook, Docker,LangChain
Technologies: Machine Learning, Deep Learning, Neural Networks, NLP, Computer Vision, Big Data Analytics, ETL Pipeline, REST APIs, Model Deployment, AWS, Azure, Google Cloud,Agile,Scrum,Statistical Analysis,LLM Fine-tuning
Soft Skills: Problem-solving, Team Collaboration, Analytical Thinking, Communication, Project Management

EDUCATION

Yenepoya University,Bangalore <i>M.Sc(CS) in AI,ML AND DATA SCIENCE (CGPA: 8.4)</i>	Yenepoya University 2023 - 2025
Jamia Hamdard Kannur Campus <i>Bachelor in Computer Applications (CGPA: 8.4)</i>	Jamia Hamdard University,Delhi 2020 - 2023
Sreepuram English Medium School and Junior College <i>Higher Secondary in Computer Science (80%)</i>	ICSE 2018 - 2020

CERTIFICATIONS

- **Oracle Cloud Infrastructure (OCI) Generative AI Professional Certification** - Oracle
- **IBM Data Analyst** – IBM
- **Generative AI: Enhance Your Data Analytics Career** – Google Cloud
- **Data Visualization with Python** – IBM
- **Python for Data Science, AI and Development** – IBM
- **Introduction to Artificial Intelligence** – Infosys
- **TCS iON Career Edge – Young Professional** - TCS

ACHIEVEMENTS AND WORKSHOPS

- Secured Silver Medal from IBM for Poster Presentation
- AI Tools Mastery Workshop – Clapingo and Growth Campus (Jul 2025)
- Agentic AI for Everyone – Progression School (Aug 2025)
- AI Tools and ChatGPT Workshop – be10x (Jul 2025)

EXTRACURRICULARS

BCG GenAI Job Simulation on Forage	April 2025
<ul style="list-style-type: none">• Completed a job simulation on AI-powered financial chatbot development for BCG’s GenAI Consulting team, enhancing client engagement use cases.• Applied Python (pandas) to manipulate and analyze 50+ financial data points from 10-K and 10-Q reports.	
Tata Group Data Analytics Job Simulation on Forage	May 2025
<ul style="list-style-type: none">• Completed a simulation on AI-powered data analytics and strategy development for Tata iQ’s Financial Services team.• Conducted exploratory data analysis (EDA) with GenAI tools on 10,000+ records, detecting risk indicators with 90% accuracy.	
Accenture UK Developer and Technology Virtual Experience Programme on Forage	May 2025
<ul style="list-style-type: none">• Completed a simulation covering the Software Development Lifecycle, gaining exposure to end-to-end development workflows.• Researched 5+ emerging DevOps trends, showcasing adaptability to evolving technology.	