ATHAR SAYED

ACADEMIC DETAILS

Mukesh Patel School of Technology, Management & Engineering, NMIMS   2024 - 2026
- M. Tech. – Artificial Intelligence   (**CGPA**:8.82/10)

Symbiosis Institute of Engineering and Technology, Symbiosis International University   2019 - 2023
- B.Tech. – Electronics & Telecommunication Engineering
- Honors in Mechatronics & Automation   (**CGPA**: 7.11/10)

PROJECTS

StreamPulse – Real-Time E-Commerce Analytics Platform   (Code)   2025
- Built a **real-time streaming analytics pipeline** using **Apache Kafka and Spark Structured Streaming**, processing **1,000+ events/min** with **<2s end-to-end latency**.
- Implemented **stream ingestion, windowed aggregations, and fault-tolerant processing** to compute live revenue trends, transaction rates, and top-selling products.
- Developed a **Streamlit dashboard with 8+ interactive visualizations** for real-time monitoring of sales, geography, and product performance.

Context-Grounded LLM Assistant for Recruiter-Facing AI Search (Live)   2025
- Developed a **production-grade LLM conversational assistant** integrated into a live portfolio, enabling natural-language search across **10+ projects, skills, experience, and publications**.
- Implemented a **context-grounded inference pipeline** with dynamic resume and page-content injection, **ensuring context-bounded, hallucination-resistant responses** via strict prompt constraints.
- Built a **serverless GenAI backend on Vercel** using **LLaMA-3.1-8B-Instruct**, configured with **temperature = 0.3** and **max_tokens = 400** for deterministic, concise outputs.

IntelliTube – AI-Powered YouTube Insight Engine (Code)   2025
- Developed an end-to-end YouTube video analysis platform supporting **100% local execution** with no external APIs, enhancing **data privacy and reducing latency by 70%**.
- Engineered audio processing pipeline using **Faster Whisper**, achieving **95% transcription accuracy** on diverse video inputs.
- Designed a multilingual sentiment analysis engine that scrapes and classifies **100+ comments** per video with **91% accuracy**, including automatic translation for non-English content
- Implemented **secure user authentication** with encrypted login/signup workflows, enabling personalized access up to **50+ users**.

Vigilix: Network Intrusion Detection & Monitoring System (Code)   2025
- **Developed a Network Intrusion Detection System (NIDS)** using the UNSW-NB 15 dataset, achieving **80%+ accuracy** in intrusion detection.
- **Evaluated machine learning models** (XGBoost, Random Forest, Isolation Forest), with XGBoost achieving **87.95% accuracy**, **85.35% precision**, and **89.61% F1-score**.
- **Optimized XGBoost performance** through hyperparameter tuning, improving accuracy by **13%** (from 78.91% to 87.95%) and F1-score by **5.25%**.
- **Automated end-to-end project workflow** by integrating **Kafka, Prometheus**,**Grafana** and a custom dashboard, enabling **99.9% uptime**.

WORK EXPERIENCE

Technical Intern
FortytwoLabs, Pune, India   Jan **2023 -** May **2023**
- **Contributed to maintaining CI/CD pipelines** by writing YAML scripts and debugging build issues under guidance**.**
- **Assisted in configuring Nginx and Linux-based reverse proxy setups** to optimize application routing & improve deployment reliability
- **Configured Apache ActiveMQ within Docker containers on CentOS,** enabling reliable message brokering and client-server communication.
- **Deployed Java-based web applications** by packaging and deploying WAR files on Apache Tomcat, ensuring stable server-side execution.

Software Engineer
FortytwoLabs, Pune, India   June **2023 -** July **2024**
- Managed build and release processes for 6+ production C++ libraries, ensuring stable **cross-platform deployment** (Linux, Windows, macOS).
- Implemented cryptographic features (e.g., policy signature modules), enhancing security and reducing processing time by **40%**.
- Worked on **143 unit tests** using **Google Test (GTest)** and **JUnit**, achieving **95% code coverage** and reducing bugs by **50%**.
- Used **Postman** and **JMeter** for API and performance testing, improving system performance by **25%**.
- Authored comprehensive documentation for **100+ error codes**, which slashed average troubleshooting time by **30%**
- Collaborated with **QA, DevOps, and Product teams**, contributing to faster and more reliable software releases.

CERTIFICATIONS

- Oracle Cloud Infrastructure 2025 Certified AI Foundations Associate - **Oracle**   **2025**
- Oracle Cloud Infrastructure 2025 Certified Generative AI Professional - **Oracle**   **2025**

PUBLICATION

- IOT Based Crowd Detection and Stampede Avoidance using Predictive Analysis - **IEEE Xplore · Apr 4, 2023**   **2023**

SKILLS

- **Programming & Analytics:** Python | C++ | C
- **Tools & Libraries:** TensorFlow | PyTorch | Keras | Streamlit | Gradio | Fast-API | Flask | Apache Spark | Kafka
- **Cloud & LLM/Agentic AI Frameworks**: LangChain | RAG | Agentic AI | Model Context Protocol (MCP) | Oracle Cloud - AI | GCP
- **DevOps & MLOps:** Docker | Kubernetes | Jenkins | Version Control | Git | Prometheus | Grafana | Kubeflow | CI/CD
- **Databases:** MongoDB | SQL | MySQL
- **Non-Technical Skills:** Leadership | Analytical Thinking | Cross-Functional Collaboration | Technical Communication

EXTRA CURRICULAR

- Participated in 5+ National and College-level Hackathons
- Placement Coordinator, M.Tech AI Batch