ATHAR SAYED

PROFESSIONAL SUMMARY

AI Engineer with 1.5+ years of industry experience building production-grade, AI-integrated platforms using Python and modern LLM frameworks. Strong expertise in RAG pipelines, agentic workflows, and context-grounded LLM systems with a focus on reliability, evaluation, and privacy-aware design. Experienced in developing full-stack AI applications, real-time data pipelines, and cloud-native deployments. Currently pursuing an M.Tech in Artificial Intelligence.

PROJECTS

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**.

IntelliTube – AI-Powered YouTube Insight Engine   (Code)   **2025**
- Developed a privacy-first, end-to-end AI pipeline for video insight extraction, running **100% locally** without third-party APIs.
- Built an audio transcription pipeline using Faster Whisper, achieving **~95% transcription accuracy** across diverse accents and content types.
- Implemented **NLP-based sentiment analysis** on **100+ scraped comments per video**, achieving **~91% classification accuracy** with multilingual translation support.

Context-Grounded LLM Assistant for Recruiter-Facing AI Search (Live)   **2025**
- Built a **production-grade LLM assistant** enabling natural-language search across **projects, skills, experience, and publications** in a live portfolio environment.
- Designed a **context-grounded inference pipeline** with dynamic content injection, enforcing **strict context boundaries** to minimize hallucinations.
- Implemented **prompt constraints, deterministic decoding (temperature = 0.3), and response validation** for consistent and reliable outputs.
- Deployed a **serverless GenAI backend** using **LLaMA-3.1-8B-Instruct**, optimized for low-latency inference.

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 | Data Structures & Algorithms | Object-Oriented Programming
- **Tools & Libraries:** TensorFlow | PyTorch | Keras | Streamlit | Gradio | Fast-API | Flask | Apache Spark | Kafka
- **Cloud & LLM/Agentic AI Frameworks**: LangChain | RAG Pipelines | Agentic Workflows | Prompt Engineering | Model Context Protocol (MCP) | LLaMA | Oracle Cloud AI | GCP |
- **DevOps & MLOps:** Docker | Kubernetes | Jenkins | Version Control | Git | Prometheus | Grafana | Kubeflow | CI/CD
- **Databases:** MongoDB | SQL | MySQL
- **Frontend & Full-Stack :** JavaScript | Node.js | REST APIs | Client–Server Architecture | API Integration

ACADEMIC DETAILS

Mukesh Patel School of Technology, Management & Engineering, NMIMS   **2024 - 2026**
- M. Tech. – Artificial Intelligence   (**CGPA**:9.10/10)

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