

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

IOT Based Stampede Detection System	2023
• Developed an IoT-based system to detect stampedes using data from four vibration sensors.	
• Created an in-house dataset consisting of sensor readings (independent variables) & a binary stampede indicator (dependent variable).	
• Conducted data preprocessing with 2K data samples and optimized model performance	
• Trained a Logistic Regression model, achieving 93% accuracy in classification.	
Predictive Analysis of Stress Based on Vital Physiological Metrics	2024
• Built a real-time stress detection system using wearable data, improving response accuracy by 25% .	
• Designed a real-time visual meter to predict the stress level of a person using visual meter (0-100%).	
• Deployed on Hugging Face Spaces using Docker.	
IntelliTube – AI-Powered YouTube Insight Engine	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.	
• Built a multilingual sentiment engine to scrape and analyze 100+ YouTube comments per video , translating non-English content and classifying sentiment into positive, neutral, and negative categories with 91 % accuracy .	
• Implemented secure user authentication with encrypted login/signup workflows, enabling personalized access up to 50+ users .	
Vigilix: Network Intrusion Detection & Monitoring System	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	2023
FortytwoLabs, Pune, India	
• 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.	
FortytwoLabs, Pune, India	2023-2024
• Built and maintained 6+ production-ready C++ libraries with cross-platform support (Linux, Windows, macOS), achieving 100% build stability and reducing integration issues by 30%	
• 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% .	
• Documented 100+ error codes , improving client troubleshooting efficiency and decreasing support tickets by 40% .	
• Collaborated with QA, DevOps, and Product teams , contributing to faster and more reliable software releases.	

CERTIFICATIONS

- [Complete Python from Beginner to Master – Udemy](#)
- [Intermediate Machine Learning - Kaggle](#)
- [Linux Mastery Mastering the Command Line - Udemy](#)
- [Mastering Data Structure & Algorithm using C and C++ - Udemy](#)
- [Google Cloud Skills Boost Course on LLM, Vertex AI, Gemini & Principles of Google Cloud](#)

PUBLICATION

- [IOT Based Crowd Detection and Stampede Avoidance using Predictive Analysis - IEEE Xplore · Apr 4, 2023](#)

SKILLS

- **Programming & Analytics:** Python | C++ | C | DSA
- **Tools & Libraries:** NumPy | Pandas | Matplotlib | Seaborn | Scikit-Learn | Keras | Tensorflow | Pytorch | Streamlit Gradio | OpenAI | Langchain | Postman | PySpark | Docker | Git | Gitlab | Kubernetes
- **Database Management:** MongoDB | PostgreSQL | MySQL
- **Operating Systems:** Ubuntu | Windows | Raspberry Pi OS | Debian | CentOS | MacOS
- **Areas of Interest:** Machine Learning | Deep Learning | LLM | IOT
- **Non-Technical Skills:** Leadership | Time-Management | Creativity | Teamwork | Critical Thinking

EXTRA CURRICULAR

- Student Volunteer at IGiftLife Social Service NGO
- Technical head at Vidyut Techfest
- Placement Coordinator, M.Tech AI Batch