

## ATHAR SAYED

## ACADEMIC DETAILS

<b>Mukesh Patel School of Technology, Management &amp; Engineering, NMIMS</b>	<b>2024 - 2026</b>
• M. Tech. – Artificial Intelligence (CGPA:8.82/10)	
<b>Symbiosis Institute of Engineering and Technology, Symbiosis International University</b>	<b>2019 - 2023</b>
• B.Tech. – Electronics & Telecommunication Engineering	
• Honors in Mechatronics & Automation (CGPA: 7.11/10)	

## PROJECTS

<b>IOT Based Stampede Detection System</b>	<b>2023</b>
• Developed an IoT-based system to detect stampedes using data from four vibration sensors.	
• Created an <b>in-house dataset</b> consisting of sensor readings (independent variables) & a binary stampede indicator (dependent variable).	
• Conducted <b>data preprocessing with 2K</b> data samples and optimized model performance	
• Trained a Logistic Regression model, achieving <b>93% accuracy</b> in classification.	
<b>Predictive Analysis of Stress Based on Vital Physiological Metrics</b>	<b>2024</b>
• Built a real-time stress detection system using wearable data, improving response <b>accuracy by 25%</b> .	
• Designed a real-time visual meter to predict the stress level of a person using visual meter ( <b>0-100%</b> ).	
• Deployed on <a href="#">Hugging Face Spaces</a> using Docker.	
<b>IntelliTube – AI-Powered YouTube Insight Engine</b>	<b>2025</b>
• Developed an end-to-end YouTube video analysis platform supporting <b>100% local execution</b> with no external APIs, enhancing <b>data privacy</b> and <b>reducing latency by 70%</b> .	
• Engineered audio processing pipeline using <b>Faster Whisper</b> , achieving <b>95% transcription accuracy</b> on diverse video inputs.	
• Designed a multilingual sentiment analysis engine that scrapes and classifies <b>100+ comments</b> per video with <b>91% accuracy</b> , including automatic translation for non-English content	
• Implemented <b>secure user authentication</b> with encrypted login/signup workflows, enabling personalized access up to <b>50+ users</b> .	
<b>Vigilix: Network Intrusion Detection &amp; Monitoring System</b>	<b>2025</b>
• Developed a <b>Network Intrusion Detection System (NIDS)</b> using the UNSW-NB 15 dataset, achieving <b>80%+ accuracy</b> in intrusion detection.	
• Evaluated <b>machine learning models</b> (XGBoost, Random Forest, Isolation Forest), with XGBoost achieving <b>87.95% accuracy</b> , <b>85.35% precision</b> , and <b>89.61% F1-score</b> .	
• Optimized <b>XGBoost performance</b> through hyperparameter tuning, improving accuracy by <b>13%</b> (from 78.91% to 87.95%) and F1-score by <b>5.25%</b> .	
• Automated <b>end-to-end project workflow</b> by integrating <b>Kafka, Prometheus, Grafana</b> and a custom dashboard, enabling <b>99.9% uptime</b> .	

## WORK EXPERIENCE

## Technical Intern

FortytwoLabs, Pune, India	Jan 2023 - May 2023
• Contributed to maintaining <b>CI/CD pipelines</b> by writing <b>YAML</b> scripts and debugging build issues under guidance.	
• Assisted in configuring <b>Nginx</b> and <b>Linux-based reverse proxy setups</b> to optimize application routing & improve deployment reliability	
• Configured <b>Apache ActiveMQ</b> within <b>Docker</b> containers on <b>CentOS</b> , enabling reliable message brokering and client-server communication.	
• Deployed <b>Java-based web applications</b> by packaging and deploying WAR files on <b>Apache Tomcat</b> , 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 <b>cross-platform deployment</b> (Linux, Windows, macOS).	
• Implemented cryptographic features (e.g., policy signature modules), enhancing security and reducing processing time by <b>40%</b> .	
• Worked on <b>143 unit tests</b> using <b>Google Test (GTest)</b> and <b>JUnit</b> , achieving <b>95% code coverage</b> and reducing bugs by <b>50%</b> .	
• Used <b>Postman</b> and <b>JMeter</b> for API and performance testing, improving system performance by <b>25%</b> .	
• Authored comprehensive documentation for <b>100+ error codes</b> , which slashed average troubleshooting time by <b>30%</b>	
• Collaborated with <b>QA, DevOps, and Product teams</b> , contributing to faster and more reliable software releases.	

## CERTIFICATIONS

- [Complete Python from Beginner to Master – Udemy](#)
- [Intermediate Machine Learning - Kaggle](#)
- [Oracle Cloud Infrastructure 2025 Certified AI Foundations Associate - Oracle](#)
- [Oracle Cloud Infrastructure 2025 Certified Generative AI Professional - Oracle](#)

## PUBLICATION

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

## SKILLS

- **Programming & Analytics:** Python | C++ | C
- **Tools & Libraries:** NumPy | Pandas | Matplotlib | Seaborn | Scikit-Learn | 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 | Model Deployment & Inferencing
- **Databases:** MongoDB | SQL | MySQL
- **Non-Technical Skills:** Leadership | Time-Management | Creativity | Teamwork | Critical Thinking | Strategic Communication

## EXTRA CURRICULAR

- Student Volunteer at IGiftLife Social Service NGO
- Participated in 5+ National and College-level Hackathons
- Placement Coordinator, M.Tech AI Batch