

Ansari Mohammed Anas

☎ (+91) 9022863844 | ✉ anas.sanjivani@gmail.com | 📍 Ansari2002 | 🔗 ansarianas | 🏠 ansari.info

Research Interest

Artificial Intelligence, Machine Learning, Deep Learning, Semiconductor, Biomedical Imaging, Medical Image Analysis, Natural Language Processing, Deep Brain Stimulation

Education

SPPU (Savitribai Phule Pune University)

B.Tech. in Computer Engineering, Major in Artificial Intelligence and Machine Learning

- Average GPA: 8.84 / 10

Awarded an appreciation letter from the Department of Computer Engineering for my excellent academic record

Pune, India

Sep. 2020 - Jun. 2024

ATT (Anjuman Taraqqi e Taleem)

Senior Secondary School

- Average GPA: 85 / 100

Pune, India

Jun. 2019 - Jun. 2020

Technical Skills

Languages

English (Fluent), Urdu (Native), Japanese (Basic)

Programming Languages

Python, C, C++, TypeScript, Linux Shell Script, Java

Backend Frameworks

Flask, Node.js, Django

Databases

MySQL, PostgreSQL, MongoDB

Libraries

NumPY, Pandas, Matplotlib, PyTorch, PyGame, OpenCV, Tensorflow, Keras

Tools & Services

Git, Google Cloud, AWS, Azure

Experience

Tata Consultancy Services (TCS) Software Engineer Intern

C++ | Data Structure | Algorithms | Cloud Computing | Machine Learning

Bengaluru, India

Aug. 2024 - Dec. 2024

- Developed efficient C++ algorithms to tackle challenging issues, utilizing sophisticated data structures to improve scalability and performance.
- Implemented the Large datasets were analyzed using machine learning models on cloud computing platforms, guaranteeing effective deployment and real-time forecasts.
- Designed and implemented end-to-end solutions that improved computing efficiency and streamlined workflows by combining C++ with cloud-based technology.
- Collaborated together on projects that required knowledge of cloud-based architectures, algorithms, and data structures in order to produce creative software solutions.

Microsoft Research Intern

Python | Deep Learning | Computer Vision | AOI | MATLAB

New Delhi, India

Nov. 2023 - May. 2024

- Employed advanced image processing techniques to preprocess and enhance the quality of images before analysis.
- Created an automated inspection system that can identify defects in manufactured products with high accuracy.
- Ensured the system can perform real-time inspection to keep up with the speed of the manufacturing process.
- Designed an intuitive interface for operators to interact with the system, review inspection results, and make decisions based on the findings.

Summer Taiwan Experience Education Program (TEEP) Intern

University: National Taiwan University of Science and Technology Supervisor: Prof. Jui Tang Wang

Taipei, Taiwan

Apr. 2023 - Aug. 2023

C++ | Machine Learning | 5G | XApp | Open RAN

- Developed an XApp that integrates with the Open RAN architecture to optimize network performance.
- Used machine learning algorithms to predict and respond to network conditions dynamically.
- Utilized C++ for its efficiency and performance in real-time processing.
- Improved key performance indicators (KPIs) such as throughput, latency, and reliability.
- Better utilization of network resources, leading to cost savings and improved user experience.

Research Collaborator (IIT Delhi)

University: Indian Institute of Technology, Delhi Supervision: Dr. Abdullah Ansari

Python | Deep Learning | Computer Vision | AOI | MATLAB | Neural Network

New Delhi, India

Dec. 2022 - Mar. 2023

- Constructed a deep learning model that predicts tunnel damages and tracks serviceability under seismic conditions. Employed advanced image processing techniques to preprocess and enhance the quality of images before analysis.
- Deployed Python for data preprocessing, model development, and evaluation using deep learning frameworks such as TensorFlow.
- Used MATLAB for conducting seismic simulations and generating training data for the deep learning model.
- Ensured the model accurately predicts damages and serviceability to improve safety and maintenance planning.

Amazon Web Services Pvt. Ltd.

Position: Development Intern

Python | JavaScript | Amazon E2C | AWS Lambda

Pune, India

Aug. 2022 - Nov. 2022

- Developed an API that accepts user input and returns sentiment analysis results.
- Visualized sentiment analysis data using a web dashboard.

Publication

- Anas Ansari, El-Hussain, I. & Ansari, A. (2025). Exploring the Multifaceted Applications of Artificial Intelligence in Earthquake Engineering: A Comprehensive Review of Literature, Techniques, and Future Trends. International Conference for Artificial Intelligence: Applications, Innovation and Ethics Muscat (Oman) (Accepted).
- Ansari, A., El-Hussain, I. & Anas Ansari. (2025). AI-Driven Seismic Tunnel Damage Prediction: A Robust Model for Risk Assessment and Mitigation in Earthquake-Prone Region. International Conference for Artificial Intelligence: Applications, Innovation and Ethics Muscat (Oman) (Accepted).
- Anas Ansari^{1*}, Adarsh Borde¹, Pranav Joshi¹, Sanskruti Kekan¹, P. N. Kalavadekar¹, "Sugarcane Disease Identification Using Deep Learning", IOSR Journal of Computer Engineering (IOSR-JCE), Volume 26, Issue 2, Ser. 2 (Mar. – Apr. 2024), PP 53-57 [\[Link\]](#)
- Ansari, Abdullah, K. S. Rao, A. K. Jain, and Anas Ansari. "Deep learning model for predicting tunnel damages and track serviceability under seismic environment." Modeling Earth Systems and Environment 9, no. 1 (2023): 1349-1368. [\[Link\]](#)
- Ansari, Abdullah, K. S. Rao, A. K. Jain, and Anas Ansari. "Formulation of multi-hazard damage prediction (MhDP) model for tunneling projects in earthquake and landslide-prone regions: A novel approach with artificial neural networking (ANN)." Journal of Earth System Science 132, no. 4 (2023): 164. [\[Link\]](#)

Selected Project

Leaf Disease Detection

Python | Machine Learning | Computer Vision | SQL | YOLOv3

Ahmednagar, India

2024-Fall

- Detected leaf diseases at an early stage to prevent their spread and minimize crop damage.
- Provided accurate diagnosis of leaf diseases to enable farmers to take appropriate action, such as applying the right treatment or removing infected plants.
- Developed a fast and efficient detection system that can process large amounts of images quickly to support large-scale agriculture.
- Created a user-friendly interface for farmers to easily upload images of plant leaves and receive instant disease diagnosis.
- Develop a cost-effective solution that can be easily deployed in agricultural settings without requiring expensive hardware or infrastructure.
- Trained a deep learning model using YOLOv3 to accurately detect and classify different types of diseases affecting plant leaves, achieving a high level of accuracy and minimizing false positives.
- Collaborated with agricultural communities, including farmers, researchers, and extension workers, to gather feedback, improve the technology, and ensure that it meets the needs and requirements of its end users.

Credit Card Fraud Detection

Python | Machine Learning | Computer Vision | SQL | MATLAB

Ahmednagar, India

2023-Spring

- Constructed models that can accurately detect fraudulent transactions while minimizing false positives.
- Enabled real-time detection of fraudulent transactions to prevent unauthorized transactions from being processed.
- Developed a cost-effective solution that can detect fraud without incurring high operational costs.
- Ensure that the fraud detection system complies with relevant regulations and standards, such as the Payment Card Industry Data Security Standard (PCI DSS).

Railway Management System

Python | Machine Learning | Computer Vision | NLP | MATLAB | SQL

Ahmednagar, India

2022-Spring

- Enhanced the efficiency of railway operations by optimizing schedules, predicting maintenance needs, and improving safety and security.
- Provided passengers with real-time information and improved their overall travel experience.
- Reduced maintenance costs and downtime by predicting maintenance needs and optimizing resource allocation.

- Enhanced railway safety by detecting potential hazards and anomalies in real-time.
- Reduced the environmental impact of railway operations by optimizing schedules and resource usage.

Car Parking Indicator

Ahmednagar, India

Python | Machine Learning | Computer Vision | SQL

2021-Fall

- Developed a system that accurately detects the occupancy status of each parking space in real-time using sensors.
- Implemented efficient data processing algorithms to analyze sensor data and make timely decisions about parking space availability.
- Incorporated AI techniques, such as machine learning algorithms, to improve the accuracy of parking space detection and adapt to changing environmental conditions.
- Enable remote monitoring of parking space availability through network connectivity, allowing parking lot operators to track occupancy levels in real time.

Honors & Award

2023	Awarded the Ministry of Education (M.O.E) Scholarship in the Summer TEEP intern, Taiwan, R.O.C, NTUST	<i>Taipei, Taiwan</i>
2023	Awarded the Appreciation Letter from the Department of Computer Science for Excellent Academic Record, SPPU	<i>Pune, India</i>
2022	Honored to receive the Best Project Presentation award from the Department of Computer Science	<i>Pune, India</i>
2022	Admitted in the Volunteering Project organized by the University of Southampton, London, UK	<i>Pune, India</i>