Taufik Khan

taufik4051@gmail.com | +919556258909 | Portfolio | Linkedin Profile | Github Profile

WORK EXPERIENCE

East Coast Railways - Sambalpur Division   Sambalpur, Odisha
Summer Intern - Railway Operations and Communication   Jun 2024 - Jul 2024

- Documented the engineering projects, enhancing understanding of tools necessary for effective analysis by 50%.
- Administered a training program for station managers on effective communication protocols, resulting in 20% decrease in communication errors.
- Collaborated with the engineering team to implement new station management procedures, resulting in a 10% reduction in train delays.

ITR(DRDO) - Chandipur   Balasore, Odisha
Technical Intern - PMC radar   May 2024 - Jun 2024

- Monitored the PMC Radar System for 4 weeks, detecting over 15 moving and 10 stationary targets.
- Researched the diverse applications of PMC radar technology for target detection and **risk management**.
- Employed PMC coherent techniques to track and analyze the trajectories of 12 missiles.

AICTE Internship Program, Remote   Remote
Summer Intern - Machine Learning and Deep Learning   Apr 2024 - Jun 2024

- Gained in-depth knowledge in **Machine Learning** and **Deep Learning**, focusing on **computer vision**.
- Reinforced an object detection model using **TensorFlow's Model Zoo**, improving performance by 200%.
- Designed a **Monte Carlo simulation** model to analyze risk scenarios, identifying potential vulnerabilities and informing **risk management** strategies that improved accuracy by 20% during project evaluations.

EDUCATION

Veer Surendra Sai University of Technology   Burla, Odisha
B.Tech *in Electronics and Communication Engineering*   Expected Jun 2025

PROJECT EXPERIENCE

Real-Time Data Pipeline for Weather Analytics   Remote
Status: Ongoing, *Code*   Nov 2024

- Programmed a scalable **data pipeline** to collect and store real-time weather data through APIs, handling upto 5,000 API calls per day.
- Integrated **Apache Kafka** for real-time data streaming and **PostgreSQL** for structured storage, resulting in a 30% increase in data processing efficiency.
- Automated batch processing and **data cleaning** using **Apache Airflow**, reducing manual processing time by 50% and ensuring accurate and timely data ingestion.

Attendance System with Face Recognition   Remote
Status: Completed, *Code*   Sept 2024

- Led the transition to a paperless practice by implementing face recognition for a faster and more accurate attendance system. Utilized **Python** and **OpenCV** to reduce manual labor with a 90% accuracy.
- Adapted **neural networks** such as CNN along with **scikit-learn** to optimize facial recognition capabilities, achieving a 20% increase in efficiency compared to traditional methods.

SKILLS AND TECHNOLOGIES

Languages: Python, Java, SQL
Libraries & Frameworks: FastAPI, OpenCV, scikit-learn, PySpark, Pytorch, scikiy-learn, spring boot
Developer Tools & Others: Docker, Git, GitHub, Postman, MongoDB, Redis, PostgreSQL, Rest API development
Coursework: DSA, Monte Carlo simulations, Statistical modeling, Machine Learning

CERTIFICATIONS

Goldman Sachs Operations Job Simulation on Forage, *Certificate*   Dec 2024
BCG GenAI Job Simulation on Forage, *Certificate*   Nov 2024