TAVAHEED TRAIQ

@ tavaheed_2022bite008@nitsri.ac.in   in tawheed-tariq-868b02249   ○ Tawheed-tariq   ☎ +91 9103100145   ⚲ Srinagar, Kashmir

EXPERIENCE

Project Intern
Indian Institute of Technology (IIT) Delhi

📅 Dec 2024 – Mar 2025   ⚲ Delhi, India – Remote

- Developed and trained an Urdu OCR model using Parseq transformer architecture.
- Processed and labeled a large dataset of 28 million images for model training.
- Achieved high performance in terms of Character Recognition Rate (CRR) and Word Recognition Rate (WRR) across all test sets.
- Enhanced character recognition by refining dataset quality and model parameters.

Research Intern
Indian Institute of Technology (IIT) Ropar

📅 Dec 2024 – Feb 2025   ⚲ Punkab, India – On-Site

- Applied machine learning to predict initial charge capacity and charge capacity after 50 cycles of lithium-ion batteries.
- Worked with a dataset of 168 data points covering 20 dopant variations.
- Implemented multiple ML models and identified XGBoost as the best-performing model.
- Analyzed feature importance to understand the impact of dopants on battery performance.

Research Intern
Indian Institute of Technology (IIT) Roorkee

📅 July 2024 – August 2024   ⚲ Uttarkhand, India – Remote

- Studied advanced IoT architectures, cloud integration (AWS IoT, Azure IoT), and event-driven systems for scalable IoT applications.
- Explored security in IoT, including Software-Defined Radio (SDR) integration and cryptography in embedded systems.
- Gained experience in IoT device management, integration techniques, and real-time data analytics for IoT-generated data.

EDUCATION

B.Tech in Information Technology   *Nov 2022 – present*
National Institute of Technology (NIT) Srinagar

📅 Grade: 9.04/10   ⚲ Srinagar, Kashmir

HSC (10+2)   *Dec 2019 – Dec 2021*
MPML Higher Secondary

📅 Grade: 9.82/10   ⚲ Srinagar, India

EXTRA CURRICULARS

Web Development Team Co-Lead, Techvaganza

- Led the Web development team for Techvaganza, the annual technical fest at NIT Srinagar

AREAS OF INTEREST

Machine Learning   Deep Learning   Networking   Computer Vision

TECHNICAL SKILLS

- **Core:** DSA, DAA, OOP, OS, DBMS
- C, C++, Python, Javascript, LaTeX
- HTML, CSS, JS, React, TailwindCSS
- Flask, FastAPI, NodeJS, ExpressJS, MongoDB, SQL
- Linux, Bash, Git, Docker, Postman, Figma
- **Operating Systems:** Kali Linux, Ubuntu, Parrot Linux
- **Other:** Machine Learning, Deep Learning, Web Scraping, Web Automation, Computer Vision
- **Package Management:** Debian, PIP, NPM

ACHIEVEMENTS

- Achieved 1st place in "Bug Bounty" competition by efficiently identifying and solving bugs in provided programs.

PROJECTS

IMDB Movie Review Sentiment Analysis   ○
- Built an NLP model using TensorFlow and Keras to classify IMDB movie reviews as positive or negative.
- Utilized RNNs/LSTMs for sequence modeling, with word embeddings and tokenization for text preprocessing.

NIT Datesheet Generator
- Developed a scheduling tool for generating exam datesheets for all engineering courses at NIT Srinagar.
- Automated timetable creation, ensuring efficient and conflict-free scheduling.

Dog vs Cat Classifier   ○
- Image classification model using MobileNetV2 and TensorFlow to distinguish between dog and cat images.
- Applied transfer learning, data augmentation, and visualization techniques to improve accuracy.

WP-Scanner   ○
- Full-stack web application for penetration testing of WordPress sites, built with React, Flask, and MongoDB.
- Features automated vulnerability scanning, plugin/theme analysis, and detailed reporting for cybersecurity assessments.

Kernel Hacking   ○
- Developed custom system calls to enhance kernel functionality, improving process management and file system operations.
- Worked with kernel internals, memory management, and debugging within a large-scale open-source codebase.