## Shikhar Sharma

Gurugram, India | shikhar.sharma22@st.niituniversity.in | LinkedIn | Portfolio

## **Objective**

I am a final-year B. Tech Computer Science student with hands-on experience in machine learning and data analysis. I have worked on projects involving predictive modelling, multi-modal ML, and system analysis, gaining practical skills in Python and supervised learning algorithms and currently exploring deep learning algorithms. I aspire to build a career in Business Intelligence and Analytics, leveraging data-driven insights to support decision-making and develop impactful solutions.

### **Projects**

#### **Hybrid Host-Based Intrusion Detection System (HIDS)**

- Used Python, system call analysis, and machine learning classifiers to build a hybrid intrusion detection system for Windows hosts.
- Tested models on attack vs. normal system call datasets using accuracy and confusion matrices.
- Learned binary classification, data preprocessing, model evaluation, and system-level feature engineering

#### Real-Time Speech Translation System (Ongoing, Team Project)

- Collaborating on the development of a cloud-native microservices application for real-time speech-to-text translation.
- Implementing audio ingestion, ASR (Whisper), and multilingual translation services using Hugging Face Transformers.
- Deploying and scaling services on Docker + Kubernetes, with API Gateway and OAuth 2.0 authentication for secure communication.
- Designing and testing low-latency pipelines (<2s) with WebSocket streaming, focusing on system reliability, scalability, and performance optimization.

#### Personality Predictor Based on Movies (Ongoing, Personal Project)

- Using Python and supervised learning classifiers to predict personality traits based on movie preferences from TMDB Top 5000 Movies dataset.
- Currently testing model performance across multiple classifiers and evaluation metrics.
- Gaining hands-on experience in data cleaning, feature engineering, dataset preparation, and algorithm evaluation.

#### Education

# B. Tech, Computer Science and Engineering with Specialization in Artificial Intelligence, NIIT University

2022 to 2026

CGPA-7.94

Relevant Modules: Deep Learning and Generative AI, Machine Learning, Artificial Intelligence

XII, Delhi Public School, Sector 45, Gurgaon (CBSE)

2022

X, Delhi Public School, Sector 45, Gurgaon (CBSE)

2020

#### Skills

- Data Analysis & Business Intelligence: Power BI (Basic), Tableau (Basic), SQL (Intermediate), Data Visualization (Matplotlib, Seaborn Basic), Storytelling & Presentation
- **Programming & Data Handling:** Python (Intermediate), Pandas (Intermediate), NumPy (Intermediate), scikit-learn (Intermediate).

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- Machine Learning & Analytics: Supervised & Unsupervised Learning, Random Forest, Ensemble Methods
- Tools & Environments: VS Code (Intermediate), Python IDLE (Primarily for ML projects)
- Foundational Knowledge: HTML (Intermediate), Jupyter Notebook, Google Colab
- Languages: English (Fluent), Hindi (Native), German (A2 Level)

#### **Certifications**

- Microsoft Power BI Data Analyst Professional Certificate, ONGOING
- Python For Data Science, Al and Development by IBM-Coursera, June 2024

#### **Positions of Responsibility**

- Volunteer, Event Curation Team SiNUsoid Tech Fest 2022, NIIT University
   Assisted in planning and organizing various technical events during the university's annual fest.
- Volunteer Convocation 2022, NIIT University
   Supported coordination and smooth execution of the convocation ceremony.
- Volunteer Nanhi Chhan Event 2022, NIIT University Helped organize a social initiative event on campus.
- Volunteer Camp Future 2023, NIIT University
   Contributed to management and execution of Camp Future 2023, at NIIT University.
- Participant Dance Competition, NDIM Cultural Fest 2023
   Represented NIIT University in inter-college cultural competition.
- Participant Dance Competition, LMNIT Cultural Fest 2024
   Showcased cultural engagement and teamwork through stage performances.
- Coordinator Flashmob, NIIT University Cultural Fest 2024
  Led coordination of performers and event execution for the cultural flashmob.