Uditanshu Pandey

"Enthusiastic and skilled in Python, data structures, algorithms, and machine learning. Proficient in scikit-learn, TensorFlow, NumPy, and pandas, with experience in NLP. Cleared the GATE 2025 exam with an AIR of 3207 in Computer Science and an AIR of 4032 in Data Science & AI. Eager to contribute to innovative projects and thrive in a dynamic environment."

EDUCATION

Indian Institute of Technology Kanpur

Jul 2025 – Present

Ph.D. in Computer Science and Engineering

Kanpur, India

Guru Gobind Singh Indraprastha University

2021 - 2025

BTech in Artificial Intelligence and Machine Learning - 9.061 CGPA(Current)

New Delhi

Amity International School (CBSE)

2019 - 2021

12th (PCM with CS) - 95.2%

New Delhi

TECHNICAL SKILLS

Programming Languages: Python, C++, SQL, SQLite, MongoDB, DJango

Deep Learning Frameworks: TensorFlow, Keras

Web Framework: Django, HTML, CSS, Bootstrap, Javascript

Libraries & Tools: NumPy, Pandas, Scikit-learn, OpenCV, NLTK, Pillow, Streamlit, Matplotlib, Seaborn, Git

PROJECTS

Conversational PDF Analysis Using LLMs | NLP Project

Jul 2024

- Intelligent Document Interaction: Developed a system for users to interact with multiple PDFs using conversational queries.
- Advanced Model Utilization: Leveraged LLaMA-3.1-70b model via Groq API for robust contextual understanding.
- Tools and Frameworks: Integrated PyPDF2, LangChain, FAISS, and HuggingFace embeddings with a Streamlit interface.

RAG-Xpert: Intelligent Document Processing | Generative AI

2024

- Enhanced RAG Pipeline: Built a framework that supports PDFs, DOCX, TXT, and Markdown files plus website-to-knowledge conversion.
- Context-Aware Responses: Used LLaMA 3.3-70B (Groq API), ChromaDB, and HuggingFace embeddings for accurate, context-aware answers; handled up to 10 concurrent sources.
- Multi-turn Memory: Maintained dialogue history for scalable, multi-turn Q&A.

Phishing URL Detector | ML and NLP Project

Nov 2023

- Predictive Analytics: Built a machine learning model to identify malicious URLs using extracted features such as domain age and word count.
- Scalable Framework: Implemented the model with Scikit-learn and deployed via Streamlit for user-friendly interaction.
- Accuracy Achievement: Achieved a detection accuracy of 94%, enhancing cybersecurity measures.

EXPERIENCE

Summer Training

Sep 2023 – Oct 2023

 $NIELIT(National\ Institute\ of\ Electronics\ \ \ \ Information\ Technology.$

Gorakhpur, India

Participated in a comprehensive web development training program focusing on the Django framework. Successfully
developed a fully functional web application as a final project. Received positive feedback from mentors for project
performance and technical proficiency.

IBM SkillsBuild Internship in Artificial Intelligence

Jul 2024 - Aug 2024

• I participated in an intensive program that included orientation, masterclasses, and hands-on learning. I focused on practical application by designing and fine-tuning chatbots using IBM Watson Assistants.

CERTIFICATES

- NIELIT Summer Training Completion Certificate
- Data Analysis with Python
- IIRS Outreach Programme on "AI/ML for Geodata Analysis" Completion Certificate
- IBM SkillsBuild Summer Internship Program on Artificial Intelligence