Kunal Chandra

New Delhi, Delhi

Experience

Intelligence Fusion & Strategic Operations (IFSO) Special Cell, Delhi Police

1st August 2025-31st August 2025

- **Data Science Intern**
- Contributed to data-driven projects analyzing intelligence and operational data to enhance strategic decision-making.
- Developed several impactful projects using machine learning and data analytics to identify patterns and support law enforcement initiatives.
- Collaborated closely with the IFSO Special Cell team onsite to implement actionable insights from complex datasets.

Technical Skills

Languages: Python, Java, C, Go, JavaScript (ES6+), TypeScript, HTML, CSS

Developer Tools: Jupyter Notebook, VS Code, GitHub, Anaconda, Google Colab, Ollama **Frameworks & Libraries**: Scikit-learn, TensorFlow, Keras, PyTorch, YOLOv8, BYTETrack

Technologies: Pandas, NumPy, Matplotlib, Seaborn, OpenCV, NLTK, Tesseract OCR, Computer Vision, LLMs

Databases: MongoDB, MySQL, SQL

Other Tools: Flask, Streamlit, Docker, Git, , ESP32 (IoT), RFID

Projects

Intelligent Traffic Signal Control System (SMARTFLOW) | Project

- Developed an Al-driven traffic management system using **YOLOv8** for real-time vehicle detection, **BYTETracker** for robust object tracking, and React for the user interface.
- Integrated IoT hardware (ESP32 with RFID) to prioritize emergency vehicles and implemented dynamic signal timing for congestion reduction.

EduX – AI-Powered Cognitive Learning Chatbot | Project

- Built an Al-driven tutoring platform using **Python (Flask)** and **Ollama, integrating LLMs** like Mistral, Wizard-Math, and Dolphin for adaptive learning, quizzes, and real-time feedback.
- Implemented cognitive learning features including personalized teaching stages, YouTube slide extraction with OCR (Tesseract + OpenCV), and analytics dashboard for performance tracking.

Image Classification using CNN | Project

- Developed an image classifier using a Convolutional Neural Network (CNN) trained on the CIFAR-10 dataset to classify images into 10 categories.
- Implemented in TensorFlow/Keras with Conv2D, MaxPooling, Batch Normalization, and Dense layers for accurate predictions.

Education

Haridwar University

September 2023 - June 2027

August 2025-June 2026

Bachelor in Computer Science | CGPA: 8.37

Indian Institute of Technology Mandi

Minor in Artificial Intelligence & Data Science

Sam International School | Schooling

ClassX:94% | 2021 CLASS XII:76.4 | 2023

Certifications and Achievements

Programming in Java (Elite) – NPTEL, IIT Kharagpur

July-October 2024

Tata Cybersecurity Security Analyst Job Simulation on Forage-TCS

January 2025

Deloitte Australia Data Analytics Job Simulation on Forage

July 2025

In Trwizardthon, From 1300+ teams and 5200+ students across 28+ states, we soared into the Top 25 Finalists

Link