

# Kunal Chandra

New Delhi, Delhi

📞 9911566654 ✉ [kunalchandra2506@gmail.com](mailto:kunalchandra2506@gmail.com) [in LinkedIn](#) [GitHub](#)

## Experience

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

1<sup>st</sup> August 2025-31<sup>st</sup> 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 AI-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 AI-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

Bachelor in Computer Science | CGPA :8.37

### Indian Institute of Technology Mandi

August 2025-June 2026

Minor in Artificial Intelligence & Data Science

### Sam International School | Schooling

Class X: 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