

Rohan Purohit

 rohan-purohit-b65062277 |  rohanpurohit14@gmail.com |  +91-8588850024 | Gurugram, India

PROFESSIONAL SUMMARY

AI/ML engineer with expertise in deep learning, computer vision, and real-time AI systems. Skilled in designing, training, and deploying ML models for healthcare, defence, and automation. Proficient in data preprocessing, feature engineering, model optimization, and deployment.

KEY PROJECTS

Real-Time Drone Detection System — Built Keras-based multi-output CNN for drone detection/subtype classification (Turkish, Chinese). Integrated OpenCV multi-camera streaming; achieved 85%+ confidence and reduced false positives by 30% via preprocessing, object detection, and perspective fusion. **Pneumonia Detection** — Designed TensorFlow CNN for 5,000+ chest X-rays, applied augmentation and normalization, benchmarked vs. Logistic Regression & Random Forest, visualized via ROC curves and confusion matrices. **AI-Based Image Downloader** — Developed Streamlit app for bulk image download with CLIP-based filtering, multiple resolutions, and ZIP export.

PROFESSIONAL EXPERIENCE

Intern – Bharat Electronics Limited (BEL), D&E/NCS Jun–Jul 2025

- Engineered defence-grade object detection pipeline (YOLO/Faster R-CNN, TensorFlow, OpenCV) for multi-camera real-time drone tracking.
- Increased accuracy to 85%+ and reduced false positives by 30% using preprocessing, noise reduction, and multi-perspective fusion.

Intern – Pan India Consultants Pvt. Ltd., Software Development Jun 2024

- Built C#/.NET serial port communication tool (sender/receiver) for industrial hardware.
- Integrated PostgreSQL with Windows/web apps, improving data access speed by 20%.

TECHNICAL SKILLS

ML & AI	Deep Learning, Computer Vision, Neural Networks, TensorFlow, Keras, PyTorch, OpenCV, YOLO, Faster R-CNN, CLIP
Programming	Python, C/C++, C#/.NET, JavaScript, HTML, CSS, React, Streamlit
Data Science	Data Preprocessing, Feature Engineering, Model Evaluation, Visualization, Pandas, NumPy, Matplotlib, Scikit-learn
Databases	PostgreSQL, Oracle, SQL, PL/SQL
Tools	Git, Docker, Linux, PIL, Torch

EDUCATION

B.E. Computer Science Engineering — Thapar Institute of Engineering & Technology, Patiala (2022–Present)
Class XII (PCM) – 97%, Amity International School, Saket (CBSE, 2021) Class X – 91.3%, Amity International School, Gurugram (CBSE, 2019)

CERTIFICATIONS

Data Structures in C++ — Coding Ninjas

LEADERSHIP & INTERESTS

Former Head of Fine Arts – Fine Arts & Photography Society. Interests: Sketching, Sculpture, Tennis.