Gaurav Mehra

Chandigarh

EDUCATION

Punjab Engineering College, Chandigarh

B. Tech Electronics and Communication Engineering

 $November\ 2022-July\ 2026$

Chandigarh

COURSEWORK / SKILLS

- Data Structures & Algorithms
- Python
- Database Management System (DBMS)
- Artificial Intelligence
- Machine Learning
- Web Development
- Computer Vision
- Deep Learning

PROJECTS

• Django

AI Powered Human Tracking System 🗷 | Python — OpenCV — YOLOv8 — Django — MySQL

- Built a real-time AI system using YOLOv8, OpenCV, and Django to detect and track humans from CCTV with 92% accuracy and j200ms latency, enabling alerts, heatmaps, and identity masking.
- Developed a full-stack platform with MySQL and jQuery for live monitoring, role-based access, and historical activity logs via a responsive dashboard.

Resume Matching System ☑ | Django — LLM — MySQL — React.js — OpenAI GPT

- Developed an AI-based platform using Django, React, and GPT to analyze resumes, detect skill gaps, and match them to job descriptions, improving relevance by 60%.
- Implemented ATS scoring, keyword density metrics, and revision tracking with a responsive UI for resume upload and instant feedback.

Crisis Navigator
 ${\bf Z}$ | Node.js — React — MySQL — Dijkstra Algo

- Implemented a real-time emergency response system to allocate ambulances/firetrucks using Dijkstra's algorithm, achieving <2s dispatch latency and reducing simulated response times by 45%.
- Designed RESTful APIs and an admin dashboard to track 100+ active incidents; integrated a Python simulation engine updating statuses every 5s, improving allocation efficiency by 60%.

INTERNSHIP

Tech Mahindra 🗷

January 2025 – April 2025 Pune. Maharashtra

Intern

- Led the end-to-end development of an AI-powered surveillance system for real-time human detection, anomaly analysis, and activity logging from CCTV feeds, improving monitoring efficiency by 35%.
- Built automation features like live alerts, heatmaps, and identity masking using YOLOv8 and OpenCV, boosting privacy compliance by 40%.
- Resolved critical authentication and logging bugs in a production AI chatbot, reducing system vulnerabilities by 70% and improving reliability.
- \bullet Worked with cross-functional teams in an agile setup to deliver 25% faster model inference and scalable, secure system logging modules.

TECHNICAL SKILLS

Languages: Python, C++, JavaScript, SQL, NoSQL, TypeScript,

Developer Tools: VS Code, Android Studio, DataGrip, Goland, Intellij Idea Ultimate , Postman , Google Collab , Workbench, Jupyter Notebook, Anaconda

Technologies/Frameworks: Linux, GitHub, ReactJS, NextJS, NodeJS, ExpressJS, Git, MongoDB, Django, Flask, OpenCv, Yolo, Computer Vision, Excel, Tableu, Numpy, Matplotlib, pandas, Tensorflow, Keras

CERTIFICATIONS

• DSA in Python Course- PW intermediate- Hackerrank

• SQL intermediate - Hackerrank

• Problem solving

• Generative Ai - Google cloud skills boost