

Daksh Mehrotra

+91-7007046198 mehrotradaksh2005@gmail.com LinkedIn GitHub LeetCode Portfolio

Education

UPES Dehradun

B.Tech – Computer Science and Engineering (CCVT) — CGPA: 8.7

Aug 2023 – Present

Dehradun, Uttarakhand

Higher Secondary — Percentage: 67%

Apr 2022 – May 2023

High School — Percentage: 91%

Apr 2020 – May 2021

Experience

Groove Innovations

May 2026 – Jun 2026

Data Engineering Intern

Remote/Hyderabad

- Developed and integrated a **dynamic CRM Form Builder** for the **QuantixOne CRM** platform, implementing reusable components, custom workflows, and seamless frontend integration.
- Conducted **end-to-end software testing**, performed **bug reporting and debugging**, collaborated with cross-functional teams to improve **product quality**, **UI/UX**, and overall application reliability.

Innoventory Solutions

Sep 2025 – Mar 2026

Software Development Intern

Bengaluru, Karnataka

- Led **end-to-end software testing**, **UI/UX usability analysis**, and **cross-functional debugging**; managed full-cycle **client coordination** for patent filings
- Contributed to **improved product reliability** and **smoother client onboarding**, supporting the team's ability to scale operations and advance **IP documentation** initiatives.

IIT Roorkee

May 2025 – Jun 2025

Research and Development Intern - Nanoelectronics

Roorkee, Uttarakhand

- Researched **memristors** for neuromorphic hardware, contributing to advancements in **nanoelectronics**, **ML-based modelling**, and circuit design.
- Supported development of **next-generation computing architectures**, advancing the lab's research pipeline towards energy-efficient, brain-inspired hardware solutions.

Projects

NETRA: Next-gen Emergency-aware Traffic Response Architecture | Python, YOLOv8, GNN

Mar 2026

- Designed end-to-end **smart traffic perception system** with YOLOv8-based vehicle and **emergency vehicle detection**, real-time density estimation per lane, and road network modelling as a **graph using NetworkX**.
- Engineered a scalable **multi-layer architecture** integrating perception, graph intelligence, and control layers helps **emergency-aware signal control** and laying the foundation for city-scale **adaptive traffic optimization**.

Rakshaka: Cybersecurity Intrusion Detection System | Python, ML, Pandas, NumPy

Jan 2026

- Independently built an **ML-based intrusion detection pipeline** with EDA, feature engineering, class imbalance handling, and benchmarking of **5+ classification models** (including ensemble methods) on large-scale network traffic data.
- Achieved optimized threat detection reliability by reducing **false positives** via hyperparameter tuning and evaluation across **Accuracy, F1-score, and ROC-AUC** — contributing to safer, more resilient network security systems.

ShipStack: Cloud-Native CI/CD Deployment Pipeline | GitHub Actions, Docker, AWS EC2

Nov 2025

- Architected a fully automated **CI/CD pipeline** using **GitHub Actions** and **Docker**, with automated builds, testing, image versioning, rollback strategies, and zero-manual-intervention deployments to **AWS EC2**.
- Significantly reduced **release time and human error** by automating the full delivery lifecycle, improving **deployment reliability** and enabling faster, consistent software delivery at scale.

Skills

Programming Languages: C, C++, Python

Technical Tools: MySQL, Git, GitHub, GitLab, PyTorch, NeuroTorch, Cisco Packet Tracer

Certifications & Accomplishments

Cloud Operations – AWS

Cloud Practitioner Essentials – AWS

Head of Events – UPES ACM-W

Campus Ambassador – UnStop

Cloud Architecture – AWS

Co-Inventor – Hardware Recommendation System Patent

Secretary – UPES ACM

Letter of Recommendation – Innoventory Solutions