



# MANPREET KOUR

2K22/IT/102

Bachelor of Technology

In Information Technology

Delhi Technological University, New Delhi

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## EDUCATION

B.TECH(Information Technology)	2022-2026	Delhi Technological University, New Delhi	9.22 CGPA (Till 3 <sup>rd</sup> Sem)
J&K Board (Class XII)	2022	Shiksha Niketan Sr. Sec. School, Jammu	99.6 %
J&K Board (Class X)	2020	Shiksha Niketan Sr. Sec. School, Jammu	96.4 %

## INTERSHIPS

### Research Intern, Artificial Intelligence and Machine Learning Society, DTU

(Jun 2024 - July 2024)

- Currently working on enhancing seafloor habitat mapping using deep learning and hyperspectral imagery
- Utilizing Mask R-CNN with Panoptic FPN for substrate segmentation and species analysis

### USIP Intern, Software Engineering Department, DTU

(Sep 2023 - Nov 2023)

- Led coordination and confidential data management, ensuring efficient project milestone completion in collaboration with the Head of Department.
- Streamlined project workflows, demonstrating precision and dedication to data security and organization.

## PROJECTS

### Lane Detection System using OpenCV - [\[GitHub\]](#)

- Created a Lane Tracker for an AI-Driven Car, utilizing OpenCV, NumPy, and other technologies for advanced computer vision capabilities
- Incorporated Haar cascades & Canny edge detection with Hough transform
- Integrated real-time date-time stamping and car detection functionalities for enhanced video processing.

### Face Recognition Using OpenCv, YoloV8 - [\[GitHub\]](#)

- Implemented a face recognition algorithm using YOLOv8 for face detection and OpenCV for video processing, enabling real-time face identification.
- Developed code to read video files, detect faces in each frame with the YOLO model, and display videos with bounding boxes around detected faces.

### Keeper App Using React Framework - [\[GitHub\]](#)

- Developed the Keeper App using the React framework, allowing users to create, view, & delete important notes
- Designed a user-friendly interface with efficient state management to ensure a seamless note-taking experience

## SKILLS

- Core Courses** : Data Structures & Algorithms, Object Oriented Programming, Database Management System, Operating System, Computer Organization and Architecture, Digital Electronics
- Extra Courses** : Web Development, Machine Learning, Deep Learning, Computer Vision, OpenCV
- Programming Languages** : C, C++, Python, HTML, CSS, JavaScript
- Databases** : MySQL, Oracle, Postgress
- Tools & Frameworks** : OpenCV, NumPy, Pandas, Matplotlib, YOLOv8, TensorFlow, Keras, React

## ACHIEVEMENTS

- Selected to represent DTU at the **Smart India Hackathon 2023**
- Secured the top position in the 12th-grade examinations, earning the title of **Jammu State Topper**
- Excelled in multiple school and district-level debate competitions and showcased strong skills in stage hosting.
- Solved **250+** problems overall on **Leetcode & GeeksforGeeks**

## POSITIONS OF RESPONSIBILITY

- Technical Head**, Society of Robotics-DTU (July 2024- Present)
  - Pioneered the proposal and presentation of Sewage Cleaning Bots (**SuperHuman Robotics**), an AI-powered autonomous robot designed for sewage cleaning, targeting startup ventures.
- Member**, IEEE-DTU (Technical Society) (June 2023- July 2024)
  - Contributed to frontend development of the **Vihaan007 Hackathon Website**, enhancing responsive design and user engagement