NANDHA ENGINEERING COLLEGE
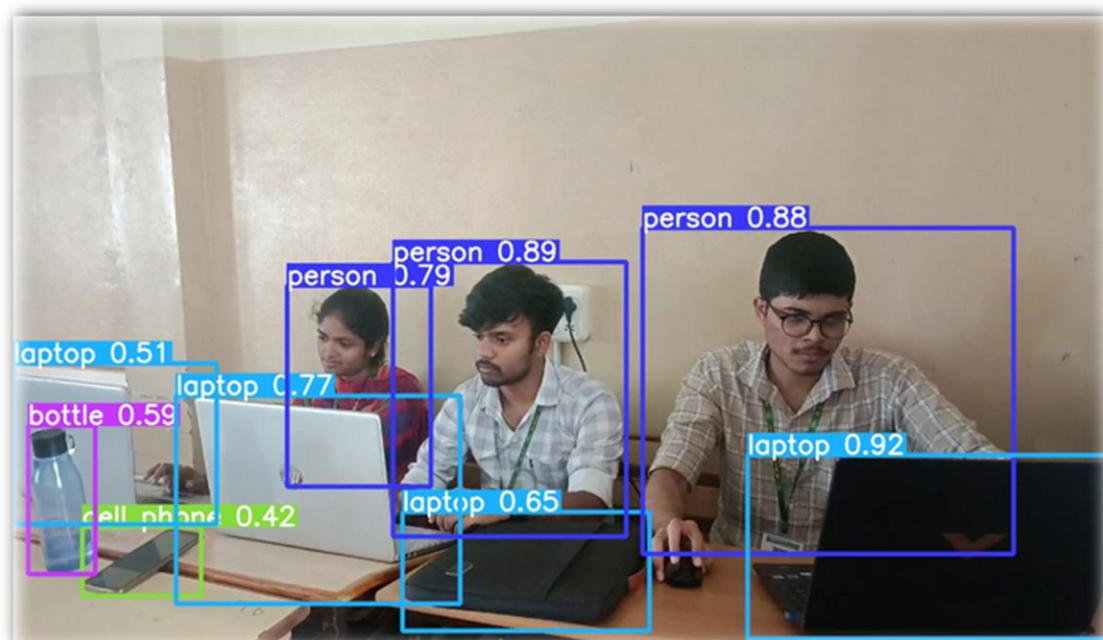## (An Autonomous Institution), ERODE-638 052

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

VISION - X

BRIEF DESCRIPTION

Vision X is a real-time object detection and tracking application built using YOLOv8 and powered by Torch and Ultralytics for efficient and accurate object detection. It features an interactive web interface developed with Streamlit and supports both webcam input and video file uploads. The application provides real-time metrics such as the number of tracked objects, frame rate, and detected object categories. Users can customize detection settings like confidence levels and select specific object classes to track.

REAL TIME APPLICATION:

1. Traffic monitoring.
2. Security surveillance.
3. Retail customer tracking.
4. Wildlife observation.
5. Sports analysis.
6. Industrial object detection.
7. Crowd management in public spaces.

PROJECT TEAM

Student Details:

1. Mohana Prasath G (22CS050)
2. Sharmila B (22CS088)
3. Hariprasad M (22CS030)

Mentor:

Ms. V. Mythily AP/CSE