## Kmit KESHAV MEMORIAL INSTITUTE OF TECHNOLOGY





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### DEPARTMENT OF INFORMATION TECHNOLOGY IV B. Tech. SEM – I A.Y: 2024-25

#### INDUSTRY ORIENTED MINI PROJECT(IOMP)

**Branch/Section:** IT - A

Team Number: 11

Team Leader: A.Snikhitha

**Team Members:** A.Snikhitha(21BD1A1202)

B.Sanjana(21BD1A1210) Ch.Sreeja(21BD1A1212) B.Harshith(21BD1A1223)

**Domain Bucket/Name:** Mobile Application

**Project Title/Statement:** Mobile Application for Haze, Smoke, Fog Removal for Enhanced

Visual Clarity

#### **Project Statement Number:**

**Abstract:** This project is focused on developing a real-time mobile application that performs image and video dehazing, significantly improving visibility in environments affected by fog, haze, smoke, or low-light conditions. The application uses a deep learning model built with PyTorch, incorporating advanced techniques like Dark Channel Prior (DCP) for estimating haze transmission and atmospheric light, along with Attention Mechanisms to enhance important image details. These methods work together to recover fine details, restore clarity, and produce high-quality visuals, even in challenging environments.

Developed with React Native and Expo, this mobile app features an intuitive, user-friendly interface for dehazing images and videos. Designed for both Android and iOS platforms, the app works seamlessly with both images and videos, making it particularly useful for applications such as surveillance, environmental monitoring, and photography. Whether used for enhancing security footage, improving outdoor photography in foggy conditions, or restoring environmental images for research, this app offers an effective solution to restore visibility and improve image quality in real-time.

GUIDE NAME: Mr.Dr.G.Narender

**GUIDE SIGNATURE:**