

## **A Novel Algorithm for Dehazing using Convolution Neural Network**

A framework for image visibility restoration and haze removal is proposed. The proposed technique utilizes hybrid median filtering in conjunction with accelerated local Laplacian filtering for the initial dehazing of images. For visual enhancement and correct restoration of colors, constrained based gradient image decomposition is applied. The proposed technique not only effectively removes haze from the images but also addresses the issues of distorted colors, visual, and halo artifacts, and haze removal from the sky region in images in a better way when compared to other techniques. Experiments were performed on outdoor RGB images as well as remotely sensed images. The effectiveness of our proposed technique is demonstrated by quantitative and visual analyzes.

**Domain:** Artificial Intelligence / Deep Learning  
**Technology:** MATLAB