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Haze-Free Imaging Through Haze-Aware Transformer Adaptations

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Abstract

This paper presents a novel method to remove non-uniform haze in real images. The process involves complex phases: initial extraction of image features, haze removal, and final image reconstruction. To address this complex challenge, the proposed approach

implements a transformer-based architecture. By extending the SwinIR image restoration framework, the method includes modifications to the deep feature extraction module and also implements adaptive tokenization and learnable position embeddings. The results show significant advances with respect to existing models, validating the effectiveness of the proposed strategy to remove non-homogeneous haze within the images.

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