



**RESEARCH ARTICLE**

# A Comprehensive Study on Fast Image Dehazing Techniques

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**Abstract**—*Image dehazing refers to procedures that attempt to remove the haze amount in a hazy image and grant the degraded image an overall sharpened appearance to obtain a clearer visibility and smooth image. In this paper, we studied various fast dehazing techniques like Tan’s dehazing method, Fattal’s dehazing method and Kaiming He et al, dehazing method. Among these methods the Dark Channel Prior (DCP) proposed by He et al, is one of the most essential method used to perform this task. The usage of the DCP to remove haze from an image is explained and a comparison between the DCP and other dehazing method was made in order to make clear people’s mind on the best dehazing method. We applied the DCP on two hundred images and experimental results show that the DCP is better than other dehazing method. This work comes to confirm that the DCP algorithm still and remain the best dehazing method of the century.*

**Keywords**— *Image dehazing; bad visibility; Dark Channel Prior; Transmission map*

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