Dominant Edge Direction Analysis Directly in the DCT Block Domain

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Abstract

Detection of dominant orientation of edges has many useful applications, such as content-based retrieval, blocking artifacts reduction, vanishing point detection, etc. This article contains two different case studies of discrete cosine transform (DCT) coefficients in order to classify the dominant edge orientation of each 8×8 DCT block directly on compressed images. The experimental results shows that the dominant blocks edge orientation are accurately detected directly in the compressed DCT domain, with reduced computational complexity.

Biography

My name is Bobaila Radu-Christian and I am a student at the ETTI Faculty in Cluj Napoca and I am 22 years old. I will graduate this year and I will continue my studies at this faculty, at one of the mastership programs that are offered.

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