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Patent Search

Invention Title	EFFICIENT DEEP IMAGE COMPRESSION SYSTEM WITH AUTO-ENCODERS FOR DIFFERENT SUB-BAND FREQUENCIES
Publication Number	47/2022
Publication Date	25/11/2022
Publication Type	INA
Application Number	202241065491
Application Filing Date	15/11/2022
Priority Number	
Priority Country	
Priority Date	
Field Of Invention	COMPUTER SCIENCE
Classification (IPC)	G06N0003040000, G06N0003080000, G06T0009000000, H04N0019610000, H04N0019900000

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Abstract:

In the digital world, image compression is a leading technology for encoding and enhancing many types of images. One of the most innovative machine learning tech learning has been extended by the inventors to the many states of neural networks, demonstrating that it is the most flexible way to analyse, classify, and compress i When the input image is transformed from the spatial pixel domain to the discrete cosine transform domain, redundancy is exist between the sub-bands and is need to improve the compression ratio. The present invention disclosed herein is an efficient deep image compression system with auto-encoders for different sub-band fi comprising of: Input Image (201); Preprocessing (202); Compression (203); Auto-Encoder (204); Decompression (205); Auto-Decoder (206); Reconstruction (207); and P (208); used to perform image compression in the discrete cosine domain with low and high frequency sub-bands. In order to reduce distortion between the input image output image, the present invention described herein uses auto-encoder based Deep CNN to map the input image to codes, and then inversely maps the codes to the image.

Complete Specification

Description:FIELD OF INVENTION

The present invention relates to the technical field of Electronics and Communication Engineering.

Particularly, the present invention is related to an efficient deep image compression system with auto-encoders for different sub-band frequencies of the broader fi image processing in Electronics and Communication Engineering.

More particularly, the present invention is related to an efficient deep image compression system with auto-encoders for different sub-band frequencies used to co the input image by redundancy removal. The present invention disclosed herein uses auto-encoder based Deep CNN to map the input image to codes, and then inv maps the codes to the output image.

BACKGROUND & PRIOR ART

It is possible to compress an image in a number of ways using the technique of image compression. There are two main categories of image compression methods: and lossless. Lossy methods have the potential to lose some information from the original image, whereas lossless methods do not. However, with Lossless, the original image data is never lost. Farlier techniques, such as arithmetic coding. Huffman coding, and the Golomb code, compressed images primarily by removing superfluon.

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Application Details				
APPLICATION NUMBER	202241065491			
APPLICATION TYPE	ORDINARY APPLICATION			
DATE OF FILING	15/11/2022			
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PRIORITY DATE				
REQUEST FOR EXAMINATION DATE				
PUBLICATION DATE (U/S 11A)	25/11/2022			

Application Status

Awaiting Request for Examination View Documents Filed Published RQ Filed Under Examination Disposed In case of any discrepancy in status, kindly contact ipo-helpdesk@nic.in