A Review on Artificial Neural Networks in Image Processing

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Abstract : Artificial neural networks (ANNs) are powerful tool for prediction which can be trained based on a set of examples and thus, it would be useful for nonlinear image processing. The present paper reviews several paper regarding applications of ANN in image processing to shed the light on advantage and disadvantage of ANNs in this field. Different steps in the image processing chain including pre-processing, enhancement, segmentation, object recognition, image understanding and optimization by using ANN are summarized. Furthermore, results on using multi artificial neural networks are presented.