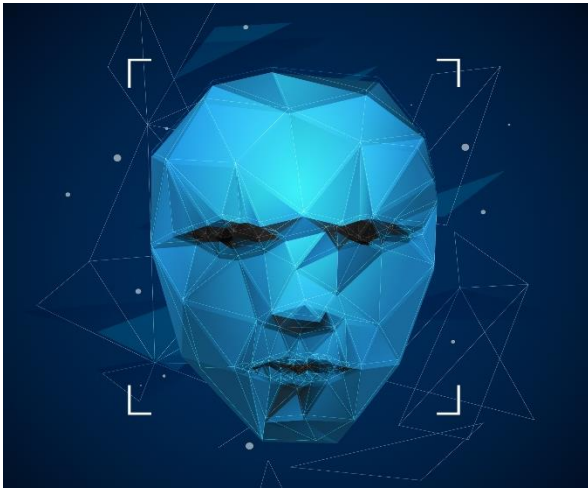


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METHOD OF EMBEDDING EXTERNAL DATA IN A DIGITAL IMAGE



▶ MORE INFORMATION

MEGA-TREND

- Innovative Technologies of the Future
- Wireless Intelligence

TECHNOLOGY READINESS LEVEL (TRL)

- TRL 4 (Lab Prototype - Lab Testing)

PATENT/ GRANTED NUMBER

- PI 2015700361

▶ TECHNOLOGY OVERVIEW

A method of embedding external data into digital image is described. Reference points (R) are determined, said reference points have one pixel between each reference point horizontally, vertically and diagonally. Pixels next to reference points (X_p) are predicted to find prediction error (e). Selected errors for predicted pixels are histogram shifted to created vacant error (f). External data is parsed into strings (L) of two to five bit, said strings comprise an odd bit value. If there are no odd bit string, parsing of uniform bit value string is performed. Parsed string is mapped into triplet of errors by switching errors into vacant shifted errors. The image is constructed by adding shifted errors (es) into predicted value of pixels (X_p). The method can be operated in lossless mode by restoring replaced pixel of shifted errors(es) with prediction error.

CONTACT US!

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