Reversible Information Hiding Using Cross Prediction and Difference Expansion

許峻豪、陳文儉

E-mail: 345429@mail.dyu.edu.tw

ABSTRACT

Information hiding can be classified into reversible information hiding and irreversible information hiding. In recent years, reversible information hiding for digital images has drawn much attention among researchers. The reversible data hiding scheme allows the cover image be recovered from the stego image completely after the secret message being extracted. The difference expansion (DE) is a famous and important reversible information hiding scheme. Many improving schemes were proposed by the researchers recently. In this thesis, the cross predictor is applied to the difference expansion for reversible information hiding scheme. Many predictors are applied to the same difference expansion of information hiding to compare the performance. The proposed cross predictor can reduce the difference expansion and improve image quality. Experimental results show that the proposed method can not only increase the embedding capacity but also improve the image quality.

Keywords : Information hiding、Difference Expansion、Reversible Data Hiding

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