

# Hybrid chaotic map-based color image encryption scheme

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**Abstract:** Digital images have become an essential part of human life due to advances in internet technology and cloud storage. These images become vulnerable when transmitted over unsecured channel. Various methods like encryption, watermarking and data hiding are used to protect the images. In which encryption is more popular. Therefore, we proposed an efficient chaos-based color image encryption scheme. Hybrid chaotic map is used to encrypt the images. Moreover, SHA-512 is used to generate the initial values of the chaotic maps. Security, robustness, and computational cost analysis are performed and compared with recent state-of-arts. Findings show that the proposed scheme is highly safe and efficient.