Data security is of utmost importance for an institution, organization and many government sectors to keep the confidential information protected from different competitors. It will help to make sure that the security of user’s data is maintained. In today’s time most of the information is first received, processed and finally is get saved within the computers and further transmitted across different networks, therefore, it is required to preserve the data in order to maintain confidentiality. Keeping in mind the importance of steganography for transmission of secret data a data hiding algorithm using edge detection and clustering mechanism is proposed. Data is embedded using LSB scheme. Also, comparison using two edge detection algorithms has been done. Simulation results of the proposed algorithm show good value of PSNR as well as an acceptable quality of the stego image which makes it difficult to detect any presence of embedded data in the cover image and hence make it secure for transmission.
Adaptive Method of Data Hiding using Edge Detection


Index Terms

Computer Science  Security
Keywords

Steganography; Fuzzy Edge detection; Clustering; Data Embedding