

Patient Medical History Data Embedding in Stego Images using in Telemedicine

B. Bhaskar¹, K. Rajesh Kumar Reddy², M.Pramod Kumar³
M.Tech student, Dept of CSE, Kuppam Engineering college¹,
Asst.prof, Dept of CSE, Kuppam Engineering College²,

M.Tech student, Dept of CSE, Sri Venkateswara College of Engg & Tech³

information technologies for the delivery of clinical care [6].

Abstract: *Telemedicine is the use of medical information exchanged from one site to another via electronic communication to improve, maintain or assist patient's health status. Telemedicine is rapidly developing application of clinical where medical information is transferred through the internet and other network for the purpose of consulting and remote medical procedures. Actually, a medical image displays accurately diagnosing the patient's medical data and conditions. An Embedding method can replace the original medical image without any missing of medical data. An Extracted image, embedding method can hold much more Confidential data. In a medical image, by using this medical history data (MHD) method store data without any missing of medical data. This paper hence proposes an Extracted image embedding method based image hiding method which embeds secret data. The experimental results indicate that the proposed method can provide a good performance in data embedding in stego images.*

Keywords: Telemedicine, MHD, Medical data.

I. INTRODUCTION

One of the greatest challenges facing the healthcare system is to provide quality care to the large segment of the population, such as geographic limitations. Protection of medical images is an issue in the management of patient's medical record [4]. Hiding techniques can be used for secure applications [5].

The embedding process creates a stego image with secret data [1]. Image hiding is one of method for protecting the important information. The cover image is transformed into a stego image. Transferring medical images among health care organizations through the Internet has become more popular. The method after embedding secret data in a medical image, the original medical image can be recovered from the stego-image. Confidentiality of patient's data can be achieved by hiding "electronic patient's report" (EPR) data in related medical images [2]. Real time Telemedicine could be as simple as a telephone call. Store and forward telemedicine involves acquiring medical data and then transmitting this data to a doctor or medical specialist at a convenient time. The data exchange involves transmission of different types of data format such as medical images, texts, and graphs. Data hiding techniques can be also used for authentication [3]. Telemedicine generally refers to the use of communication and

II. RELATED WORK

Embedding MHD method:

In Medical History Data method while data embedding here we follow the different steps.

Input: Cover image, secret data.

Output: Stego image.

1. Divide the image into disjoint 3*3 blocks.
2. Randomly choose blocks and evaluate a Message bit can be embedded (good vs. bad block).
3. If block is bad, skip it and do not insert message bit
4. If block is good, insert the bit into the block parity
5. If after embedding the block becomes not good, Keep the change but repeat the same message bit in the Next block.

Extracted method:

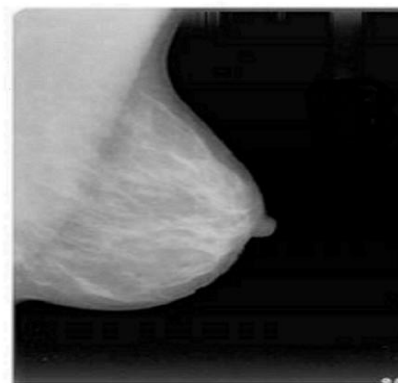
Input: Stego image.

Output: Secret data.

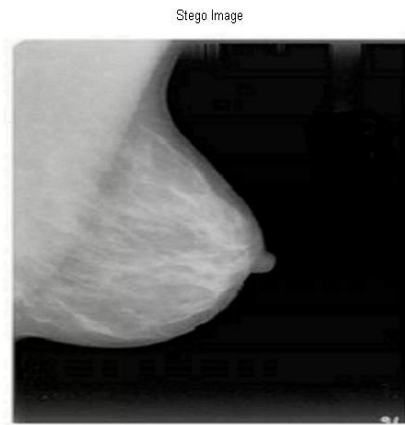
1. Generate the same random walk through the Image blocks.
 2. Read the parity from all good blocks.
- Adaptive steganography = modifications are Correlated with the Image content.
- Avoiding areas of uniform colour.

III. EXPERIMENTAL RESULTS

Cover Image



COVER IMAGE



STEGO IMAGE

Extracted Image

radius (Colles'), and spine fractures was observed. The rate of endometrial cancer was increased in the tamoxifen group (risk ratio = 2.53; 95% confidence interval = 1.35-4.97); this increased risk occurred predominantly in women aged 50 years or older. All endometrial cancers in the tamoxifen group were stage I (localized disease); no endometrial cancer deaths have occurred in this group. No liver cancers or increase in colon, rectal, ovarian, or other tumors was observed in the tamoxifen group.

EXTRACTED IMAGE

IV. CONCLUSION

In this paper we are using medical images for transmitting the confidential medical data between any two places without loss of data. Here concluded that in future enhancement that has by using video streams transfer the data without losing.

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Author Profiles



B. Bhaskar received the B.Tech Degree in Information Technology from Jawaharlal Nehru University, Anantapur in 2010. Pursing M.Tech (CSE) in Dept of Computer Science & Engineering Kuppam Engg College, Kuppam under Jawaharlal Nehru University, Anantapur.



K. Rajesh Kumar Reddy received the B.Tech. Degree in Computer Science and Engineering from Jawaharlal Nehru Technological University, Anantapur in 2009, M.Tech(S.E) from Jawaharlal Nehru Technological University, Anantapur in 2011 and currently working as Assistant Professor in Kuppam Engineering College. He is member of International Association of Engineering (IAEE), IACSIT, UACEE and CSI.



M. Pramod Kumar received the B.Tech Degree in Computer Science and Engineering from Jawaharlal Nehru University, Anantapur in 2012. Presently Pursing M.Tech (CS) in Dept of Computer Science Engineering Sri Venkateswara College of Engg & Tech (SVCET), Chittoor under Jawaharlal Nehru University, Anantapur.