Project work done by the students of M. Tech using IIPC infrastructure

Year: - 2010 - 2011

1. **Title** : Towards Design and Implementation of Frequency Domain based Authentication System Using Wavelet Transform

   Name : Madhumita Sengupta

   Department : Department of Computer Science & Engineering, University of Kalyani

   Report : The project discussed the issues regarding how to send secret information embedded in image, to authenticate an image secretly and its application in security and communication, addressing both theoretical and practical aspects, and tracking the design problems.

2. **Title** : Towards Design and Implementation of a (2, N) Visual Cryptographic Technique for Banking Applications

   Name : Jayanta Kumar Pal

   Department : Department of Computer Science & Engineering, Kalyani Govt. Engg. College

   Report : In this project a new (2, n) visual cryptographic scheme has been designed which may be useful in banking operations in the "either or survivor" mode. This technique may generate shares with less space overhead compared to the other algorithms.

3. **Title** : Design and Implementation of Visual Cryptographic Protocol Through Meaningful Shares To Transmit Secret Messages/Images

   Name : Subhankar Ghatak

   Department : A. K. Choudhury School of Information Technology, University of Calcutta

   Report : This project has designed and implemented a secure transmission technique that combines the features of visual cryptography and steganography along with multimedia data hiding.

4. **Title** : Summarization Using the Concept of Social Networking

   Name : Aditi Khanra

   Department : Department of Computer Science & Engineering, University of Kalyani

   Report : This multi document summarization technique helps to access important data from different documents. It can use the concept of social networking, where sentences are treated as a node and similarity between them is treated as edges.

5. **Title** : Implementation of Idea Algorithm

   Name : Murari Krishna Saha

   Department : Department of Computer Science & Engineering, Kalyani Govt. Engg. College

   Report : This project presents the improved IDEA algorithm, which implements a variety of the IDEA cryptographic algorithm and is oriented towards computer

network applications demanding high throughput. This is one of the most popular algorithms as it can be used in the PGP (Pretty Good Privacy) system.

6. **Title** : Microprocessor based Water Level Indicator

   Name : Meera Kumari

   Department : Department of Computer Science & Engineering, University of Kalyani

   Report : In this project the microprocessor is used to monitor the water level in the tank. The system automatically switches on the pump when water level is below a certain minimum value and automatically switches off the pump when water level reaches a certain maximum value.

7. **Title** : Substitution Base Encryption Decryption Technique Using Genetic Algorithm (SBEDTGA)

   Name : Sarmistha Sarkar

   Department : Department of Computer Science & Engineering, University of Kalyani

   Report : The idea of this project is to determine the benefits of applying a Genetic Algorithm (GA) to a cryptanalytic problem. In addition to this there is a search for the possibility of exploiting the features of Genetic Algorithm in a deterministic way; to generate Pseudo Random Numbers (PRNs) using Linear Congruential Method and also the traditional encryption technique (Triangular Encryption) is implemented sidewise.