

Final Year Project Synopsis



DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

COLLEGE OF ENGINEERING & MANAGEMENT, KOLAGHAT
(Affiliated to MAKAUT, WB)

Purba Medinipur – 721171, West Bengal, India

A. Project Title:

Image encryption based on chaotic-map

B. Team Members:

1. KASTURI CHATTERJEE (CSE/21/071)
2. NISHA MASANTA (CSE/21/T-148)
3. ABIR DATTA (CSE/21/134)

C. Project Guide:

Prof. Chinmay Maiti.

D. Abstract:

As the exchange of data over the open networks and Internet is rapidly growing, security of the data becomes a major concern. One possible solution to this problem is to encrypt the data. The data can be text, image, audio, video etc. In today's world most of the multimedia applications involve images. Earlier image encryption techniques like AES, DES, RSA etc. exhibit low levels of security and also weak anti attack ability. This problem was overcome by using chaos based cryptography. The chaotic systems are very sensitive to initial conditions and control parameters which make them suitable for image encryption.

E. Objective / Aim / Goal of the Project:

The objective of this project is to develop a robust and secure image encryption system using chaotic maps. The aim is to leverage the inherent unpredictability and sensitivity to initial conditions of chaotic systems to design an encryption algorithm that ensures high levels of security and resistance to common cryptographic attacks. The goal is to protect digital images from unauthorized access, tampering, and theft by transforming them into an unrecognizable format while ensuring that the original image can be accurately restored by authorized users.