A Project Report

On

DATA CONCEALMENT USING LSB SUBSTITUTION TECHNIQUES

Submitted to

Amity University Uttar Pradesh

In partial fulfilment of the requirements for the award of the degree of

Bachelor of Technology

in

Computer Science & Engineering

by

Gaurav Walia

&

Himalaya Monga

under the guidance of

Mr. Sanjeev Tomar

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

AMITY SCHOOL OF ENGINEERING AND TECHNOLOGY

AMITY UNIVERSITY UTTAR PRADESH

NOIDA (U.P.)

April 2012

DECLARATION

We, **Gaurav Walia ,Himalaya Monga**, student(s) of B.Tech **(CSE)** hereby declare that the project titled **"DATA CONCEALMENT USING LSB SUBSTITUTION TECHNIQUES"** which is submitted by us to Department of **Computer Science & Engineering**, Amity School of Engineering and Technology, Amity University Uttar Pradesh, Noida, in partial fulfilment of requirement for the award of the degree of Bachelor of Technology in **Computer Science & Engineering**, has not been previously formed the basis for the award of any degree, diploma or other similar title or recognition.

Noida

April 30, 2012

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Gaurav Walia

A2305208370

…….

Himalaya Monga

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CERTIFICATE

On the basis of declaration submitted by Gaurav Walia, Himalaya Monga student(s) of B. Tech CSE, we hereby certify that the project titled "**DATA CONCEALMENT USING LSB SUBSTITUTION TECHNIQUES**" which is submitted to Department of Computer Science and Engineering Amity School of Engineering and Technology, Amity University Uttar Pradesh Noida , in partial fulfilment of the requirement for the award of the degree of Bachelor of Technology in Computer Science and Engineering, is an original contribution with existing knowledge and faithful record of work carried out by him/them under my guidance and supervision.

To the best of my knowledge this work has not been submitted in part or full for any Degree or Diploma to this University or elsewhere.

Noida

April 30,2012

Mr. SANJEEV TOMAR
(Senior Lecturer)
Department of Computer Science and Engineering
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ACKNOWLEDGEMENT

Setting a goal may not always be an easy task; obstacles are bound to come in its way and when this happens, help is welcome and without help of those people whom we are mentioned here, this goal would not have been successful. The completion of any project brings with it a sense of satisfaction, but it is never complete without thanking those people who made it possible and whose support has crowned my efforts with success.

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Last but not the least I am also thankful to other technical staff of the Department whohelped me to complete my project successfully.

Thanking you

STUDENT SIGNATURE(s)

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ABSTRACT

Basically, we have designed an application for users round the world, to share confidential data in any form amongst their peers, colleagues, friends & family. The interface is user-friendly having an option of both encrypting text as well as a data file. Be it an image, a song, a video!

- Features of the application:
  - ✓ Concealing Plain text in an Image File.
  - ✓ Concealing Plain text in an Audio File.
  - ✓ Concealing Image in an Image File.
  - ✓ Concealing Image in an Audio File.
  - ✓ Concealing Audio in an Image File.
  - ✓ Concealing Audio in an Audio File.

- Added Features:
  - ✓ Dynamic File Compression
  - ✓ Password Encryption for compressed files

- Implement and demonstrate an interactive interface for multiple parties to share confidential data (Messages, Images & Audio) in a hidden shell using the techniques of LSB substitution

- The advantage of such an application is, that the data is not only encoded and sent to the user, but also sent in a hidden shell so as to reduce doubts of suspicion.

- The encoded file, inherently has an increased file size, therefore efficient algorithms for file compression are to be applied.

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