Visvesvaraya Technological University
BELGAUM, KARNATAKA
ವಿಶ್ವೇಶ್ವರಯ್ಯ ತಾಂತ್ರಿಕ ವಿಶ್ವವಿದ್ಯಾಲಯ
ಬೆಳಗಾವಿ, ಕರ್ನಾಟಕ

A PROJECT REPORT

ON

"SEQUENCE KEY GENERATION USING W7 ALGORITHM FOR EFFICIENT DATA ENCRYPTION"

(Sponsored by KSCST, bangalore)

Submitted to Visvesvaraya Technological University in partial fulfillment of the requirement for the award of Bachelor of Engineering degree in Computer Science and Engineering

Submitted by

CHETHAN KUMAR T	4JN06CS020
H.N. PHANEENDRA	4JN06CS030
MOHAMED GHAIBAN	4JN06CS045
SREENIVAS S	4JN06CS081

Under the guidance of

Mrs. MANJULA G. R B.E., MTech.
Asst. Professor, Dept. of CS & E

Department of Computer Science & Engineering
Jawaharlal Nehru National College of Engineering
Shimoga - 577 204

JUNE 2010

ABSTRACT

When the internet provides essential communication between tens of millions of people and is being used as a tool for commerce, security becomes tremendously an important issue to deal with one essential aspect for secure communication is cryptography; cryptography is the science of information security. Cryptography can be used to provide confidentiality using encryption methods and can also provide data integrity, authentication and non-repudiation.

The W7 algorithm is a byte-wide, synchronous stream cipher optimized for efficient hardware implementation at very high data rates. W7 is proposed in order to replace the A5/1 cipher in GSM security mechanism which produces a keystream of 128 bits that can be used as most efficient for any encryption techniques like the text encryption, image encryption, speech encryption as well as video encryption. As a result of the implementations we can conclude that the keys which are used in the image encryption technique overcome the elimination of the textured zones which were present in the image that were using the recent algorithms.