Providing digital privacy from any kind of malicious activity is referred to as data security. It also includes protection of data from corruption, especially threatened by hackers and eavesdroppers. Various cryptographic systems help provide data security. Elliptic Curve Cryptography (ECC) is advantageous over many cryptographic schemes due to smaller keys and very fast key generation. Smaller key size leads to moderately fast encryption and takes less processing power since computation is less. This paper presents the areas of ECC which have been researched on in depth and a comparative study of various encoding techniques used in ECC implementation.

Index Terms

Computer Science  Information Sciences

Keywords

ECC, ECDSA, ECC encryption, encoding schemes, ASCII, matrix mapping.