Abstract

We live in the era of information explosion and have witnessed the trend of leveraging
cloud-based services for large scale content storage, processing, and distribution. Data security and privacy are among top concerns for any business environments. As more and more security breaches happening all over the world in different forms as a threat to the information industry, the end user should have the protection and privilege of secured access. Chaos possesses many interesting properties, such as deterministic but random like complex behavior, high sensitivity to initial conditions and system parameters and long term unpredictability. This paper introduces a cellular automata based chaotic encryption scheme and the results are comparable with well-known AES block cipher algorithm.

References

Enhancing Image Security using Chaotic Map and Block Cipher

Index Terms

Computer Science
Security

Keywords

Chaotic Encryption  Cellular Automata  Aes Block Cipher  Image Encryption
Symmetric Key Cryptography