

Comparative Analysis of Tensor Based Light Weight FHE

Vinay Kumar Devara¹, Dr. Anshul Mishra², Dr. D. Ramesh³

Research Scholar Department of Computer Science¹

Research Supervisor Department of Computer Science and Engineering²

NIILM University, Kaithal, Haryana, India^{1,2}

Research Co-Supervisor Department of Computer Science³

Kakatiya University, Warangal-TG, India³

Abstract: *The Homomorphic Encryption technique does a computational operation on unoriginal data. There are a few reasons for the inconvenience of the existing structure. One of the reasons is the inherent slow blueprint because of a bootstrapping procedure or cap her text refreshing algorithm, complex circuit examination because of bit w_i seen crypton, large message expansion, and public key. In this research, the FHE based symmetric key is used. Here the proposed framework was analyzed with the various security level, and it provides semantic security. Later, the novelty of the proposed framework was proved with an experimental analysis and comparative analysis. In the future, crypt analysis would be analyzed on FHE based symmetric key.*

Keywords: Cloud Computing, Homomorphic Encryption technique.