

# Srinivas University

Mangalore - India



## Atomic Research Centre (ARC)

### CENTRE FOR CLOUD BASED BIG DATA STORAGE ENVIRONMENT



**Dr. M. Ravi Kanth, Assistant Professor at VNRVJIET & Research Scholar  
Institute of Computer Science & Information Sciences**

- 1. Purpose of ARC:** Focusing on the data generation, organization, and security.
- 2. Objective of ARC:** To propose and develop a novel architecture involving the data outsourcing, data sharing and data management for the security of the cloud environment in multiple layers.
- 3. Description on Proposed Research:** An hybrid algorithmic module was developed for the important procedures like Data compression, Data clustering and Data Indexing. Corresponding attributes were tested for the analysis of the performance metrics. Though many research and studies were done on the cloud security none of them proved the strength and effectiveness of the security architecture. Hence a decentralized security architecture based on the block chain codes was developed for the IoT applications. A special authentication protocol was proposed for this architecture. All these experiments were conducted in a spark environment.
- 4. Expected Outcome:** Demonstrate the effectiveness of the security performance against space complexity, time complexity and throughput
- 5. List of the Team Members:** Dr. K. Krishna Prasad and Dr. M. Ravi Kanth
- 6. List of Working Papers:**
  - (1) A NOVEL INCONSEQUENTIAL ENCRYPTION ALGORITHM FOR BIG DATA IN CLOUD COMPUTING
  - (2) DISTRIBUTED AUTHENTICATION USING BLOCK CHAIN FOR PROTECTED COMMUNICATION IN CLOUD BASED IOT PLATFORM
- 7. List of related Published Papers in Journals, Proceedings, Book Chapters, Magazines by Coordinator & his/her Group year wise in APA format.**
  - (1)

**Dr. M. Ravi Kanth**

**27-04-2022**

**Name & Signature of Coordinator with date**