

ANALYSIS ON VOTING DATA DEDUPLICATION TECHNIQUES IN CLOUD

Submitted in partial fulfillment of the requirements for the award of
Bachelor of Engineering degree in Computer Science and Engineering

By

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

SCHOOL OF COMPUTING

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**INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)**

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BONAFIDE CERTIFICATE

This is to certify that this Project Report is the bonafide work of **V. MONISH (40110779)** and **MIR VIZARATH ALI (40110760)** who carried out the Project entitled "**ANALYSIS ON VOTING DATA DEDUPLICATION TECHNIQUES IN CLOUD**" under my supervision from November 2023 to April 2024.

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12/04/2024

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DECLARATION

I, **V. MONISH (40110779)**, hereby declare that the Project Report entitled **ANALYSIS ON VOTING DATA DEDUPLICATION TECHNIQUES IN CLOUD**” done by me under the guidance of **Dr. Minu Susan Jacob Ph.D.**, is submitted in partial fulfillment of the requirements for the award of Bachelor of Engineering degree in **Computer Science and Engineering**.

DATE: 12/04/2024

PLACE: Chennai

A handwritten signature in blue ink, appearing to read 'V. Monish', with a stylized flourish at the end.

SIGNATURE OF THE CANDIDATE

ACKNOWLEDGEMENT

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ABSTRACT

Data de duplication is one of important data compression techniques for eliminating duplicate copies of repeating data, and has been widely used in cloud storage to reduce the amount of storage space and save bandwidth. To protect the confidentiality of sensitive data while supporting de duplication, the convergent encryption technique has been proposed to encrypt the data before outsourcing. To better protect data security, this project makes the first attempt to formally address the problem of authorized data de duplication. Different from traditional de duplication systems, the differential privileges of users are further considered in duplicate check besides the data itself. We also present several new de duplication constructions supporting authorized duplicate check in hybrid cloud architecture. Security analysis demonstrates that our scheme is secure in terms of the definitions specified in the proposed security model. As a proof of concept, the proposed work implements a prototype of our proposed authorized duplicate check scheme and conduct test bed experiments using our prototype. The proposed work shows that our proposed authorized duplicate check scheme incurs minimal overhead compared to normal operations.