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A STUDY ON DATA PROTECTION USING CONVERGENT ALGORITHM

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ABSTRACT

Data protection is a critical concern in today's digital age, where vast amounts of information are generated and stored every day. Convergent algorithms offer a promising solution in safeguarding sensitive data against unauthorized access and breaches. By utilizing convergent algorithms, data can be securely encrypted and stored in a manner that ensures both confidentiality and integrity. These algorithms employ a deterministic approach, where identical pieces of data produce the same cipher text, facilitating efficient deduplication and storage optimization without compromising security. Furthermore, convergent algorithms enable secure data sharing and collaboration, as authorized parties can access encrypted data without needing to decrypt it first. This approach not only enhances data privacy but also streamlines data management processes, making it a valuable tool in the arsenal of modern cyber security strategies.