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Exploring Privacy- Preserving Techniques for Secure Data Sharing in Cloud Environments

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ABSTRACT

Data sharing that protects users' privacy is a major issue in the ever-changing world of cloud computing, particularly for sensitive information that needs to be stored and processed remotely. The many methods and severe obstacles involved in achieving privacy-preserving data sharing in cloud computing settings are investigated in depth in this study article. An exploration of the complex web of cryptographic techniques, anonymization methods, and access control paradigms reveals the wide array of tools used to protect private information while facilitating easy collaboration and sharing. Also highlighted are the ongoing research obstacles that call for new approaches, and the essay sheds light on some promising new trends that might change the game. With the goal of providing a thorough guide to privacy-preserving data exchange in the cloud, this discourse will outline possible future possibilities.

Keywords: Data Sharing, Privacy- Preserving Techniques, Security, Cloud Environments