

Security of Data in Cloud Computing

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Abstract: Information security has risen as a fundamental concern in the domain of cloud computing, where organizations progressively depend on cloud-based administrations to store, oversee, and handle touchy information. This inquire about article digs into the multifaceted challenges and vulnerabilities related with information security in cloud situations, pointing to survey the viability of current security components. Utilizing a mixed-methods approach, the ponder coordinating both quantitative and subjective information collection strategies, counting organized study surveys conveyed to IT experts and cloud benefit clients, as well as in-depth interviews with space specialists specializing in cloud computing and cybersecurity.

The goals of this think about include recognizing and categorizing major information security dangers such as information breaches, insider dangers, and uncertain APIs; testing the execution and unwavering quality of different encryption calculations; assessing get to control methodologies counting multi-factor confirmation and role-based get to control; investigating information reinforcement and fiasco recuperation instruments; and analyzing inspecting and checking instruments utilized by cloud suppliers. Besides, the think about conducts a comparative assessment of universal information assurance benchmarks and arrangements, such as GDPR, CCPA, and ISO/IEC 27001, along with the security hones of driving cloud benefit suppliers like AWS, Microsoft Sky blue, and Google Cloud.

The information will be analyzed through a combination of expressive and inferential measurable procedures to measure study reactions, substance examination for subjective experiences from interviews, and comparative examination to benchmark best hones and approach adherence. The comes about are anticipated to offer noteworthy experiences and key proposals for reinforcing information security systems. Eventually, this inquire about will contribute to the improvement of more strong information security approaches and conventions for organizations leveraging cloud innovations..

Keywords: Cloud Computing, Data Security, Encryption, Access Control, Cloud Backup, Disaster Recovery, Auditing, Monitoring, Cloud Compliance, Data Protection Policies, GDPR, ISO/IEC 27001, AWS, Microsoft Azure, Google Cloud, Cybersecurity

