

A  
Major Project Report  
On  
**PROXY RE-ENCRYPTION APPROACH TO SECURE DATA  
SHARING IN CLOUD COMPUTING**

*Submitted to*  
**Jawaharlal Nehru Technological University, Hyderabad**  
*in partial fulfillment of the requirement for the award of Degree of*  
**Bachelor of Technology**  
*in*  
**Computer Science & Engineering**

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**CERTIFICATE**

This is to certify that the Major-Project entitled “**PROXY RE-ENCRYPTION APPROACH TO SECURE DATA SHARING IN CLOUD COMPUTING**” is submitted by **Ch.Neha(196YIA0523), E.Akshaya(196YIA0530, G.Vaishnavi(196YIA0537), B.Thapaswini (196YIA0516)** in the partial fulfillment of requirement for the award of degree of Bachelor of Technology in Computer Science and Engineering during academic year 2022-23.

  
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## ABSTRACT

As the Internet of Things has grown, data sharing has become one of the most beneficial cloud computing applications. Even though this technology has a pleasing aesthetic, data security is still one of its difficulties because inappropriate data utilisation might have a number of unfavourable impacts. In this research, we present a proxy re-encryption technique for secure data transfer in cloud environments. Data owners can outsource their encrypted data to the cloud using identity-based encryption, and authorised users can access the data through proxy re-encryption construction. Because Internet of Things devices have limited resources, an edge device acts as a proxy server to conduct computationally intensive tasks. Additionally, by utilising information-centric networking capabilities, we successfully distribute cached content through the proxy, hence boosting the quality of service and effectively utilising the network capacity. It accomplishes fine-grained data access control and lessens centralised system bottlenecks. Our strategy for ensuring data security, confidentiality, and integrity has the potential, as shown by the security study and plan review..



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