INTEGRITY AUDITING AND DATA SHARING WITH SENSITIVE INFORMATION FOR SECURE CLOUD STORAGE

Project Work submitted to

J.J College of Arts and Science (Autonomous), Pudukkottai

in partial Fulfilment of the requirements for the award of the Degree of

MASTER OF COMPUTER APPLICATIONS

Submitted by

S. MADHUBALA
(Register No: P17LCA1006)

Under the Guidance of

Ms. A. MARIA STELLA M.Sc., M.Phil., SET.

Assistant Professor, Department of Computer Applications

DEPARTMENT OF COMPUTER APPLICATIONS

J.J COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)

(Re-Accredited by NAAC with 'A' Grade-Third Cycle)

PUDUKKOTTAI-622422 , TAMILNADU

APRIL - 2020

J.J COLLEGE OF ARTS AND SCIENCE (Autonomous)

J.J Nagar, Pudukkottai – 622 422

DEPARTMENT OF COMPUTER APPLICATIONS

CERTIFICATE

This is to certify that the project report entitled **"INTEGRITY AUDITING AND DATA SHARING WITH SENSITIVE INFORMATION FOR SECURE CLOUD STORAGE"** is the bonafide record of the project work done by **S.MADHUBALA (REGISTER NUMBER: P17LCA1006)** submitted to Department of Computer Applications, J.J College of Arts and Science (Autonomous), Pudukkottai, in partial fulfilment of the requirements for the award of degree of **Master of Computer Applications** during the academic year 2019-2020.

Internal Guide   **Head of the Department**

                                                                      External Examiners

                                                                      1.

                                                                      2.

Ms. A. MARIA STELLA M.Sc., M.Phil., SET.

Assistant Professor, Department of Computer Applications

CERTIFICATE

This is to certify that the Project report **"INTEGRITY AUDITING AND DATA SHARING WITH SENSITIVE INFORMATION FOR SECURE CLOUD STORAGE"** is the bonafide record of the project work done by **S. MADHUBALA (REGISTER NUMBER: P17LCA1006)** Under my guidance and supervision for the partial fulfilment of **Master of Computer Applications**, in Department of Computer Applications**,** J.J College of Arts and Science (Autonomous), Pudukkottai. This Project has not formed on the basis of any other work submitted for the award of any degree, diplomo, associateship or fellowship for this or any other institution.

SIGNATURE OF THE GUIDE

(Ms. A. MARIA STELLA)

Date:

Place :

DECLARATION

I **S. MADHUBALA** hereby declare that the project entitled **"INTEGRITY AUDITING AND DATA SHARING WITH SENSITIVE INFORMATION FOR SECURE CLOUD STORAGE"** submitted to the J.J college of Arts and Science (Autonomous), Pudukkottai, in partial fulfilment of the requirements for the award of the Degree of Master of Computer Applications is a record of original project work during the academic year 2019-2020 under the Guidance and Supervision of **Ms.A.MARIA STELLA M.Sc.,M.Phil.,SET.** Assistant Professor, J.J College of Arts and Science(Autonomous), Pudukkottai.

(S. MADHUBALA)

Date :

Place :

ACKNOWLEDGEMENT

First and foremost, I thank the **ALMIGHTY** who sustained his powerful blessings on me at all stages of my project work.

I render my heartfelt thanks to **Mr. N. SUBRAMANIAN, B.sc., L.L.B., P.G.D.B.A.(Aus.), Secretary,** J.J Group of Institutions, Pudukkottai and **Dr. KAVITHASUBRAMANIAN, M.com., M.phil., Ph.D.** Trustee, Karpaga Vinayaga Educational Trust for providing a wonderful atmosphere for pursuing my course ofstudy.

I also thank our Principal Sir **Dr. J. PARASURAMAN, M.A., M.B.A., P.G.D.C.A., M.C.A., M.phil., B.Ed., Ph.D.** for his continuous support throughout my year of study.

I render my gratitude earnestly to **Dr. S.J. SATHISH AARON JOSEPH, M.Sc., M.Phil., P.G.D.E.Com., B.Ed., Ph.D.,** Assistant Professor and Head, Department of Computer Applications, who inspired me all throughout the days of my project work.

I am also thank my Project Co-ordinator **Dr. N. KANAGARAJ, M.C.A., M.phil., Ph.D., SET.** Assistant Professor, Department of Computer Applications, who extended
his co-operation throughout the days of my project work.

I am deeply indebted to my Guide **Ms. A. MARIA STELLA, M.Sc., M.Phil., SET.** Assistant Professor and Head, Department of Computer Applications, for providing me the necessary guidance to complete my project work in time.

I also thank all the other faculty members of my Department for their kind co-operation.

Finally, I thank my Parents and friends for the support and encouragement throughout the days of my project work.

S. MADHUBALA

Fantasy Solution

Find ur Passion...

PROJECT COMPLETION LETTER

To Whom It May Concern

This is to certify that **Miss. S.MADHUBALA (Reg.No:P17LCA1006)** who is currently pursuing final year **M.C.A (Master of Computer Applications)** in **J.J COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS), PUDUKKOTTAI** has done her project work **"INTEGRITY AUDITING AND DATA SHARING WITH SENSITIVE INFORMATION FOR SECURE CLOUD STORAGE"** in our company during the period December 2019 to March 2020.

We congrulate on your presence with us and confident that your excellence would bear a resemblance to success in the future endeavors.

Place: Trichy

Date: 04/03/2020

Authorized Signature

(With Seal)

ABSTRACT

Cloud storage is used for the storage of large data and it provides storage platform for enterprise and individuals and also using cloud storage system user can store and access data remotely. Remote data integrity auditing is proposed to guarantee the integrity of the data stored in the cloud. In some common cloud storage systems like in cloud storage services, users store their data remotely to the cloud and realize the data sharing with others. In Electronic Health Records (EHR) system, the cloud file might contain some sensitive information. The sensitive information should not be known to others when the cloud file is shared file realizes the sensitive information hiding, but will make this shared file unable to be used by others. How to realize data sharing with sensitive information hiding in remote data integrity auditing still has not been explored up to now. In order to address this problem, proposes a remote data integrity auditing scheme that realizes data sharing with sensitive information hiding. A third party auditor (TPA) to check the integrity of outsourced data and be worry-free. To securely introduce an effective TPA, the auditing process should bring in no new vulnerabilities towards user data privacy. This paper proposes a secure cloud storage system supporting privacy-preserving public auditing and extend our result to enable the TPA to perform audits for multiple users simultaneously and efficiently. As a result, scheme makes the file stored in the cloud able to be shared and used by others on the condition that the sensitive information is hidden, while the remote data integrity auditing is still able to be efficiently executed.

CONTENT