A PROJECT REPORT

on

DIGITAL WATERMARKING OF AUDIO SIGNALS FOR ENHANCED SIGNAL PROTECTION

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by

Gautam Nag (RA1811005010278)

Shruti Srivastava (RA1811005010271)

Under the guidance of

Dr. C. Naveen
(Assistant Professor, Department of Electrical and Electronics Engineering)

FACULTY OF ENGINEERING AND TECHNOLOGY

SRM Nagar, Kattankulathur- 603 203
Kancheepuram Dist.

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BONA FIDE CERTIFICATE

Certified that this project report titled "**DIGITAL WATERMARKING OF AUDIO SIGNALS FOR ENHANCED SIGNAL PROTECTION**" is the bonafide work of **Gautam Nag (RA1811005010278) and Shruti Srivastava (RA1811005010271)** who carried out the project work under my supervision. Certified further, that to the best of my knowledge the work reported herein does not form part of any other project report or dissertation on the basis of which a degree or award was conferred on an earlier occasion of this or any other candidate.

Signature of the Guide
Dr. C. NAVEEN
Assistant Professor
Department of EEE
SRM IST

Signature of the HOD
Dr.K.VIJAYAKUMAR,M.E.,Ph.D
Professor and Head
Department of EEE
SRM IST

Internal Examiner

External Examiner

Date:

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(GAUTAM NAG)

(SHRUTI SRIVASTAVA)

ABSTRACT

In today's world we know the importance of encryption and privacy and with data being the most prized possession it is more important than ever to protect that data. Therefore for our project we are aiming at using this as our principal objective for protecting signal and audio during transmission.

To do this will use digital watermarking and using a digital image/unique code superimposing the signal and then transposing that image as a watermark on the audio signal.

Watermarking is a technique used to label digital media by hiding copyright or other information into the underlying data. The aim is to create a watermark that must be imperceptible or undetectable by the user and should be robust to attacks and other types of distortion. In our method, the watermark is kept as a digital image or if contingency arises a masked signal copy.

It is then weighted in the time domain to account for temporal masking. We discuss the detection of the watermark and assess the robustness of our watermarking approach to attacks and various signal manipulations.

We believe that doing so will uniquely enhance security of the audio signal.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES