Deep Learning Enabled Semantic Communications with Speech Recognition and Synthesis

Software Lab-VI Report and seminar

Submitted in partial fulfillment of the requirements for the award of the

degree of

Bachelor of Computer Application

Submitted By

AKHIL RAJ S

200021093040

Under the guidance of

Ms. DIVYA SAJI

(Assistant Professor, Department of Computer Application)

Department of Computer Application
Mangalam M.C Varghese College of Arts And Science
(Affiliated to MG University,Kottayam)
Ettumanoor, Kottayam
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BONAFIDE CERTIFICATE

Certified that this is a Bonafide Report of the **Software Lab -VI and seminar** *done by Ms.* **AKHIL RAJ S** *with University Register Number* **200021093040** *under our supervision and guidance. The software lab -VI and seminar report has been submitted to the Department of Computer Application, Mangalam M.C. Varghese College of Arts and Science, Ettumanoor, Kottayam in partial fulfilment of the award of the Degree of Bachelor Of Computer Application.*

Internal Guide

Ms. Divya Saji
Assistant Professor,
Dept. of Computer Application

Head of the Department

Mrs. Lakshmi R Nair
Assistant Professor,
Dept. of Computer Application

Internal Examiner

External Examiner

DECLARATION

I hereby declare that this seminar report entitled **"Deep Learning Enabled Semantic Communications with Speech Recognition and Synthesis"** is an original report prepared by us after detailed reference and consultation during our period of study in Mangalam M.C Varghese college of Arts and Science, Ettumanoor, affiliated to Mahatma Gandhi University, under the guidance of Ms. Divya Saji, Assistant Professor, Department of Computer Application.

The finding derived in the seminar report is based on the data collected by our self. I declare that this report has not been submitted elsewhere for award of any other degree.

Akhil Raj S

ACKNOWLEDGEMENT

Firstly, I thank GOD Almighty whose blessing were always with me and helped me to complete this seminar work successfully.

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I would like to extend my sincere thanks to **Ms. Divya Saji,** Assistant Professor, Department of Computer Application for her guidance and cooperation, without which this would not have been a success.

I would like to extend my graceful thanks to the staff and management of Mangalam M.C. Varghese College of Arts & Science, for there valuable supports to carry out this seminar work.

This leaf of acknowledgement would not be complete without a special word of thanks to my beloved parents and friends for their valuable support, encouragement and love, which enabled me to successfully bring out this seminar.

Akhil Raj S

ABSTRACT

The Internet of Things (IoT) introduces numerous new devices and applications that require security solutions.The proposed framework is based on SD-IoT and provides security services to the IoT network.The C-DAD(Counter-based DDoS Attack Detection) application is used to detect DDoS attacks and is based on counter values of different network parameters.

The proposed framework is dynamic, programmable, and consumes fewer CPU and memory resources while detecting DDoS attacks efficiently in a minimum amount of time.

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