

# **A NLP INTEGRATED APPROACH FOR CLEARANCE CONTROL IN AIR TRAFFIC SERVICES**

**A PROJECT REPORT**

*Submitted by*

**KAILASA ESWARAN I [211716205024]  
BALAJI C [211716205012]**

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**ANNA UNIVERSITY::CHENNAI 600 025**

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**ANNA UNIVERSITY: CHENNAI 600 025**

**BONAFIDE CERTIFICATE**

Certified that this project report “**A NLP INTEGRATED APPROACH FOR CLEARANCE CONTROL IN AIR TRAFFIC SERVICES**” is the bonafide work of **KAILASA ESWARAN I [211716205024]** and **BALAJI C [211716205012]** who carried out the project work under my supervision.

**SIGNATURE**

Mr.M.Ashok M.Tech., (Ph.D)  
**HEAD OF THE DEPARTMENT,  
(INCHARGE)  
INFORMATION TECHNOLOGY,  
RAJALAKSHMI INSTITUTE OF  
TECHNOLOGY,  
KUTHAMBAKKAM, CHENNAI.**

**SIGNATURE**

Mr.M.Ashok M.Tech., (Ph.D)  
**SUPERVISOR,  
ASSISTANT PROFESSOR,  
INFORMATION TECHNOLOGY  
RAJALAKSHMI INSTITUTE OF  
TECHNOLOGY,  
KUTHAMBAKKAM, CHENNAI.**

This project report submitted for viva voce examination to be held on.....

**INTERNAL EXAMINER**

**EXTERNAL EXAMINER**

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## **ABSTRACT**

Air Traffic Control (ATC) is one of the most important part in aviation. Air Traffic Controllers, sometimes referred as ATCOs, are the guardian angles of the sky. They are provided by means of ground-based traffic controllers, who directs the plane through the managed airspace, and offers consultative services to plane in non-controlled airspace. The first motive of ATC global is to prevent collisions, organize and expedite the glide of traffic, and furnish facts and different aid for pilots. Air traffic management is one in all the foremost stressful job because it needs high level human intervention, concentration and dynamic deciding. Therefore ATC is that the least automatic field in aviation because of challenges faced in voice recognition and transmission. Our plan primarily uses decision sign detection and text to speech conversion by implementing LSTM to instruct the pilot for handling the flight. The LSTM model is fed with inputs from the pilot and undergoes text summarization part. The main downside is going to be, hissing channel, that ends up in poor voice recognition. Our project uses long short term memory of perennial neural networks for text connected process of knowledge and conjointly aims in building a good voice recognition server.

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