



**DEPARTMENT OF
COMPUTER SCIENCE & ENGINEERING
TEZPUR UNIVERSITY**

NAPAAM, TEZPUR-784028
ASSAM : INDIA

This is to certify that **Anjalee Basumatary** (CSM11058) has prepared the dissertation report entitled “**Development of ESNOLA Based Bangla Speech Synthesis Engine**”. This work was done under the supervision and guidance of **Dr. Smriti Kumar Sinha, Professor**, (Tezpur University), **Mr. Joyanta Basu** and **Mr. Milton Samirakshma Bepari** (Advanced Speech Processing Section, CDAC Kolkata).

The dissertation is the result of their efforts and endeavours. The dissertation is found worthy of acceptance for the completion of their major project in **Master of Computer Application (MCA)**.

(Internal Project Guide)

Dr Smriti Kumar Sinha
Professor,
(Tezpur University)
Date:

(External Project Guide)

Joyanta Basu
Mr. Joyanta Basu
(CDAC Kolkata)

Date: 09/05/2014

Milton Samirakshma Bepari
Mr. Milton Samirakshma Bepari
(CDAC Kolkata)

Date: 09-05-2014



**DEPARTMENT OF
COMPUTER SCIENCE & ENGINEERING
TEZPUR UNIVERSITY**

NAPAAM, TEZPUR-784028
ASSAM : INDIA

CERTIFICATE OF ACCEPTANCE

This is to certify that Anjalee Basumatary (CSM11058) of Computer Science & Engineering Department of Tezpur university has worked under the supervision of **Mr. Joyanta Basu** and **Mr. Milton Samirakshma Bepari** of Advanced Speech Processing Section, CDAC Kolkata and **Dr. Smriti Kumar Sinha** of Tezpur university and has successfully completed the project entitled “**DEVELOPMENT OF ESNOLA BASED BANGLA SPEECH SYNTHESIS ENGINE**”.

The dissertation is the result of their efforts and endeavours. The dissertation is found worthy of acceptance for the completion of their major project in **Master of Computer Application (MCA)**.

DATE :

PLACE : Tezpur University, Tezpur


Dr. SYAMANTA M HAZARIKA

Associate Professor

HOD Department of CSE

Tezpur University

Head
Department of Computer Science & Engineering
Tezpur University



DEPARTMENT OF
COMPUTER SCIENCE & ENGINEERING

TEZPUR UNIVERSITY

NAPAAM, TEZPUR-784028
ASSAM : INDIA

CERTIFICATE

This dissertation entitled “**Development of ESNOLA Based Bangla Speech Synthesis Engine**” submitted by Anjalee Basumatary (CSM11058) in partial fulfilment of requirements for the degree of Master of Computer Application (MCA) of Tezpur University has been examined.

Internal Examiner

Date:

Place: Tezpur University, Tezpur

External Examiner

Date: **EXTERNAL**

Place: **EXAMINER**

Professor
Department of Computer Science & Engg.
Tezpur University



**DEPARTMENT OF
COMPUTER SCIENCE & ENGINEERING**

TEZPUR UNIVERSITY

NAPAAM, TEZPUR-784028
ASSAM : INDIA

DECLARATION

We hereby declare that the dissertation work entitled “**Development of ESNOLA Based Bangla Speech Synthesis Engine**” is submitted to the Department of Computer Science & Engineering, Tezpur University is prepared by us and was not submitted to any other Institute or University for the award of any other degree or diploma.

Date: 26/05/2014

Place: Tezpur University

Anjalee Basumatary

Anjalee Basumatary

ACKNOWLEDGEMENT

First of all, we would like to convey our thanks to Dr. Shymanta M. Hazarika, Professor and Head of the Department of Computer Science and Engineering, Tezpur University for allowing us to carry out the project in CDAC, Kolkata.

We are thankful to Col. (Retd) Asheet K. Nath (Executive Director, CDAC Kolkata) for his kind permission to work in this project.

We are highly indebted to Ms. Soma Mitra (Group Head, Advanced Speech Processing, CDAC Kolkata) for her valued guidance received during building of this project & for getting her generous help in every manner.

We are also thankful to Dr. Amit Chaudhuri (Group Head, ICT & Services, CDAC Kolkata) and Mr Abhijit Chatterjee (Project Engineer, ICT & Services, CDAC Kolkata) for his technical help and his strong recommendation that helped me to get into a prestigious institute like CDAC Kolkata.

We offer our heart full thanks and sincere gratitude to Mr. Joyanta Basu (Guide and supervisor) Advanced Speech Processing, CDAC Kolkata for offering his graceful guidance, and encouragement in every step of the project work without which it would have been impossible to fulfil the target.

Sincere thanks to Mr. Milton Samirakshma Bepari (Advanced Speech Processing, CDAC Kolkata) for his constant guidance and support during the course of our project in the area of Text to Speech Synthesis.

We would like to thank Ms. Tulika Basu and Ms. Soma Khan (Advanced Speech Processing, CDAC Kolkata) for their advice and their effort in leading us in the right direction. We would like to express our heart filled thanks to all the technical staff for their help and support during the project.

Finally, we would like to thank our parents for all their encouragement and support during this process.