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## CERTIFICATE

This is to certify that the dissertation entitled “*An improved implementation of Effective number of codon*” submitted by **Chaitanya Prasad Barik** bearing **Roll No: CSI12013** is an authentic research work carried out by him under my personal supervision and guidance for partial fulfilment of the requirements and the regulations for the award of the degree of *Master of Technology* with specialization *Information Technology* during the session 2012-14 at Tezpur University, Tezpur.

To the best of my knowledge, the matter embodied in the thesis has not been reproduced elsewhere or submitted to any other university/institute for the award of any Degree or Diploma.

Handwritten signature of Dr. Sidhartha Sankar Satapathy, dated 26/5/2014.

Signature of Supervisor

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## CERTIFICATE

This is to certify that **Chaitanya Prasad Barik** bearing **Roll No: CSI12013** has prepared the dissertation entitled "*An improved implementation of Effective number of codon*".

The dissertation is the result of his effort and endeavour. He has worked under the supervision and guidance of **Dr. Sidhartha Sankar Satapathy**, Asst. Professor, Department of Computer Science & Engineering, Tezpur University. The dissertation is found worthy of acceptance for the award of the degree of *Master of Technology* with specialization *Information Technology* during the session 2012-14 at Tezpur University.

  
Signature of HOD

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## CERTIFICATE

The dissertation entitled "*An improved implementation of Effective number of codon*" submitted by **Chaitanya Prasad Barik** bearing Roll No: **CSI12013** for partial fulfilment of the requirements for the degree of *Master of Technology* with specialization *Information Technology* at Tezpur University has been examined.

A handwritten signature in black ink, appearing to be 'Dinesh', written over a horizontal line.

Internal Examiner

Date: 26-05-14

**Professor**  
Department of Computer Science & Engg.  
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A handwritten signature in black ink, appearing to be 'Indrajit', written over a horizontal line.

External Examiner

Date: 26-05-14

**EXTERNAL  
EXAMINER**

## Declaration

I hereby declare that the thesis entitled *An improved implementation of Effective number of codon* submitted to the Department of Computer Science and Engineering under the School of Engineering, Tezpur University, in partial fulfilment of the requirements for the award of the degree of Master of Technology is based on bonafide work carried out by me. The results embodied in this thesis have not been submitted in part or in full, to any other university or institute for award of any degree or diploma.

Chaitanya Prasad Barik

Chaitanya Prasad Barik

Roll No: CSI12013

M.Tech (Information Technology)

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I dedicate this thesis to those who believed in me, my parents and family.

Chaitanya Prasad Barik