

Tezpur University

Certificate

This is to certify that Monisha Devi bearing Enrolment No.CSI13029 has prepared the dissertation report entitled 'Dynamic Virtual Backbone based Routing in Cognitive Radio Networks'.

The dissertation is the result of her effort and endeavors. The dissertation is found worthy of acceptance for the award of Master of Technology in Information Technology. She has worked under the supervision and guidance of Dr. Nityananda Sarma.

No part of this dissertation has been submitted elsewhere for award of any other degree.

Date: 1 June 2015

Place: Tezpur

Signature of HoD

Prof. S.M. Hazarika Designation: Professor

Department of CSE, Tezpur University

Head

Department of Computer Science & Engg. Tezpur University



Tezpur University

Certificate

This is to certify that the dissertation report entitled 'Dynamic Virtual Backbone based Routing in Cognitive Radio Networks" submitted to the Department of Computer Science and Engineering, Tezpur University, in partial fulfilment for the award of the degree of Master of Technology in Information Technology, is a record of bonafide work carried out by Monisha Devi, Enrolment No.CSI13029, under my supervision and guidance.

All help received by her from various sources have been duly acknowledged.

No part of this dissertation has been submitted elsewhere for award of any other degree.

Date: 1 June 2015 Place: Tezpur

> Signature of Supervisor **Prof. Nityananda Sarma** Designation:Professor

Designation:Professor Department of CSE, Tezpur University



Tezpur University

Certificate

This dissertation entitled 'Dynamic Virtual Backbone based Routing in Cognitive Radio Networks' submitted by Monisha Devi, Enrolment.No. CSI13029 for partial fulfilment of the requirements for the degree of Master of Technology in Information Technology at Tezpur University has been examined by us and found to be satisfactory.

No part of this dissertation has been submitted elsewhere for award of any other degree.

Prolocizo15

Internal Examiner
Date: 1 June 2015

External Examiner
Date: 1 June 2015

EXTERNAL EXAMINER

Declaration

I, Monisha Devi, hereby declare that the thesis entitled 'Dynamic Virtual Backbone based Routing in Cognitive Radio Networks' 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 in Information 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.

Date: 1 June 2015 Place: Tezpur

Monisha Devi

MTech(Information Technology)

Roll No: CSI13029 Department of CSE, Tezpur University

Acknowledgement

Its my great pleasure to show due regards to persons involved in bringing out successful completion of the thesis work entitled 'Dynamic Virtual Backbone based Routing in Cognitive Radio Networks' undertaken by me as a prerequisite towards partial fulfilment for the award of Master of Technology in Information Technology at Tezpur University

It would not be possible for me to achieve success with my effort alone. There were a lot of people who extended their supportive hands towards me in the way of making my work a success. It is a pleasure to convey my gratitude to all of them.

First of all, I would like to express my deep sense of respect and gratitude towards my advisor and guide **Dr. Nityananda Sarma**, who has been the guiding force behind this Project work. I am greatly indebted to him for his constant encouragement, invaluable suggestions and support from an early stage of this research and providing me extraordinary experiences throughout the work. I consider it as my good fortune and proud to record that I had the opportunity to work with such a wonderful person.

Secondly, I would like to express my profound gratitude to Mr Sanjib Kumar Deka, for his constructive criticism and valuable suggestion and for allowing me to soak his knowledge and experience. His technical knowledge and company at the time of crisis would be remembered lifelong.

Sincere gratitude is extended to **Dr. Shyamanta M Hazarika**, HOD, Department of Computer Science and Engineering, Tezpur University, Tezpur, and all other faculty members of this department for their valuable suggestions.

I am especially indebted to my parents for their love, sacrifice, and support. I would like to thank for all the thoughtful and mind stimulating discussions we had, which prompted me to think beyond the obvious. Finally, I extend my gratefulness to all those who are directly or indirectly involved in this work.

Date: 1 June 2015 Place: Tezpur