Tezpur University

Certificate

This is to certify that Utpal Borah bearing Enrollment No.CSI13009 has prepared the dissertation report entitled *Non-Cooperative MAC Protocol Design For Heterogeneous Cognitive Radio Networks.*

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

Signature of HoD

(Dr.Shyamanta M Hazarika)

Designation:Professor

Department: CSE

Tezpur University

Head
Department of Computer Science & Engg.
Tezpur University

Tezpur University

Certificate

This is to certify that the dissertation entitled *Non-Cooperative MAC Protocol Design For Heterogeneous Cognitive Radio Networks*, submitted to the Department of Computer Science and Engineering, Tezpur University, in partial fulfillment for the award of the Degree of **Master of Technology** in Information Technology, is a record of bona fide work carried out by **Mr Utpal Borah**, Roll No.CSI13009, under my supervision and guidance.

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

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

Place: Tezpur

Date: 01 June 2015

(Dr. Nityananda Sarma)

Professor

Supervisor

Tezpur University

Certificate

This dissertation entitled "*Non-Cooperative MAC Protocol Design For Heterogeneous Cognitive Radio Networks*" submitted by Utpal Borah, Enrollment.No. CSI13009 for partial fulfillment 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.

Internal Examiner

Date:

External Examiner

Date: EXTERNAL EXAMINER

Declaration

I, Utpal Borah, hereby declare that the dissertation entitled *"Non-Cooperative MAC Protocol Design For Heterogeneous Cognitive Radio Networks"* submitted to the Department of Computer Science and Engineering under the School of Engineering, Tezpur University, in partial fulfillment 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.

utpal Borah

(Utpal Borah)

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

Utpal Borah