



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

NAPAAM, TEZPUR-784028  
ASSAM : INDIA

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**CERTIFICATE**

This is to certify that Shri **Kaushik Dev Sarmah** bearing Roll number **CSI09019** has prepared the dissertation entitled “**Extension of the IEEE 802.15.4e MAC layer protocol in a cluster tree topology for an industrial automation environment with multi level of hierarchy**”. This work embodied in this dissertation is a bonafied work done by him under my supervision and guidance.

It is further certified that the work has not been submitted for the award of any other degree or diploma elsewhere.

Date: 26-5-2011

(Dr. D. K. Saikia)  
Professor,  
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**CERTIFICATE**

This dissertation entitled “**Extension of the IEEE 802.15.4e MAC layer protocol in a cluster tree topology for an industrial automation environment with multi level of hierarchy**” submitted by Shri Kaushik Dev Sarmah in partial fulfillment of the requirements for the degree of **Master of Technology in Information Technology** has been examined.

Internal Examiner

Date:

Place: Tezpur

External Examiner

Date:

Place: Tezpur

**EXTERNAL  
EXAMINER**

## DECLARATION

I hereby declare that the dissertation work entitled “**Extension of the IEEE 802.15.4e MAC layer protocol in a cluster tree topology for an industrial automation environment with multi level of hierarchy**” submitted to the **Department of Computer Science & Engineering, Tezpur University**, is prepared by me and has not been submitted to any other institution for award of any other degree.

Date: 26.5.2011

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## **Acknowledgments**

I take this opportunity to express a deep sense of gratitude towards my guide, Dr Dilip Kumar Saikia, Professor, Department of Computer Science & Engineering, for providing excellent guidance, encouragement and inspiration throughout the project work. Without his invaluable guidance, this work would never have been a successful one.

I would like to thank my family for their love and support which always have been a source of my inner strength. Last but not the least, I would also like to thank all my classmates for their valuable suggestions and helpful discussions.

**Kaushik Dev Sarmah**  
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