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Certificate from Head of the Department

This is to certify that Zenifa Sharmin Ali, bearing Enrolment No.CSI13001 has prepared the dissertation report entitled "Co-expressed pattern finding using bicluster ensemble and construct Gene Regulatory Network".

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. Dhruba Kumar Bhattacharyya.

Signature of HOD (Dr. Shyamanta M Hazarika)

Head Department of Computer Science & Engg. Tezpur University



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Certificate from Supervisor

This is to certify that Zenifa Sharmin Ali, bearing Enrolment No. CSI13001 has prepared the dissertation report entitled "*Co-expressed pattern finding using bicluster ensemble and construct Gene Regulatory Network*". The work was done under my supervision and guidance.

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.

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

M. Dubla

Signature of Supervisor (Dr. Malay Ananda Dutta)



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Certificate from Supervisor

This is to certify that Zenifa Sharmin Ali, bearing Enrolment No. CSI13001 has prepared the dissertation report entitled "*Co-expressed pattern finding using bicluster ensemble* and construct Gene Regulatory Network". The work was done under my supervision and guidance.

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.

Signature of Supervisor (Dr. Dhruba Kumar Bhattacharyya)



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Certificate from External and Internal Examiner

This dissertation entitled "Co-expressed pattern finding using bicluster ensemble and construct Gene Regulatory Network" submitted by Zenifa Sharmin Ali, bearing Enrolment.No. CSI13001 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.

No 00000012015

External Examiner Date:

OPIN

Internal Examiner Date: EXTERNAL EXAMINER

Acknowledgement

It is my great pleasure to show due regards to persons involved in bringing out my successful completion of the project work entitled "Co-expressed pattern finding using bicluster ensemble and construct Gene Regulatory Network" undertaken by me as a prerequisite towards partial fulfillment for the award of M.Tech in Information Technology at Tezpur University.

It would not have been possible for me to achieve the 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. First of all my heartiest gratitude goes to my project guide Dr. Dhruba K. Bhattacharyya, Professor, Department of Computer Science & Engineering, Tezpur University for his excellent guidance and valuable suggestion during the course project. My sincere thanks to Dr. Malay Ananda Dutta, Professor, Department of Computer Science & School of Engineering, Tezpur University for his valuable guidance, advice and support throughout the course of this project work and to all the faculty members of CSE department for their support during this project.

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

Zenifa Sharmin Ali

Declaration

I, Zenifa Sharmin Ali, hereby declare that the thesis entitled "Co-expressed pattern finding using bicluster ensemble and construct Gene Regulatory Network." 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.

Lerifa Sharmin Ali

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