Declaration of Authorship

This is to certify that the work presented in this thesis is the outcome of the analysis and simulations carried out by Md. Safirur Rashid, Bhuiyan Sanjid Shafique, and Tauhid Mostahid under the supervision of Dr. Md. Hasanul Kabir and cosupervision of Md. Bakhtiar Hasan, Department of Computer Science and Engineering (CSE), Islamic University of Technology (IUT), Dhaka, Bangladesh. It is also declared that neither of this thesis nor any part of this thesis has been submitted anywhere else for any degree or diploma. Information derived from the published and unpublished work of others has been acknowledged in the text and a list of references is given.

Supervisor

Dr. Md. Hasanul Kabir

Professor,

Dept. of Computer Science and Engineering, Islamic University of Technology (IUT)

Co-Supervisor

Md. Bakhtiar Hasan

Bakhtian

Lecturer,

Dept. of Computer Science and Engineering, Islamic University of Technology (IUT)

Authors

Md. Safirur Rashid

Student No: 170041020 Academic Year: 2020-21

Sanjid

Bhuiyan Sanjid Shafique

Student No: 170041029 Academic Year: 2020-21

Tauhid Mostahid

Student No: 170041059 Academic Year: 2020-21