

## Declaration of Authorship

This is to certify that the work presented in this thesis is the outcome of the analysis and experiments carried out under the supervision of Tareque Mohmud Chowdhury, Assistant Professor of the Department of Computer Science and Engineering (CSE), Islamic University of Technology (IUT), Dhaka, Bangladesh. It is also declared that neither 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 Information derived from the published and unpublished work of others has been acknowledged in the text and a list of references is given.

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