

DR. AHSANUR RAHMAN [ARA2]

Associate Professor & Undergraduate Coordinator(CSE)

PhD in Computer Science, Virginia Polytechnic Institute and State University, Virginia, USA

BSc in Computer Science and Engineering, Bangladesh University of Engineering and Technology,
Dhaka, Bangladesh

Office: SAC 914

Office hours:

Available in Canvas LMS.

Phone: +88 02 55668200 Ext – 1566

Email: ahsanur.rahman@northsouth.edu

Website: <https://sites.google.com/site/rahmanmahsanur/>

Google Scholar URL: <https://scholar.google.com/citations?user=pC9GsVQAAAAJ&hl=en>

Scopus Profile: <https://orcid.org/0000-0002-2049-3178>

Biography

I am an associate professor of the Electrical & Computer Engineering Department (ECE) department of North South University (NSU), Dhaka, Bangladesh. I joined NSU in Dec 2015. I completed my PhD from Virginia Tech in Fall 2015. During my PhD, I worked as a Graduate Research Assistant (GRA) with my adviser, Dr. T. M. Murali, from the Summer of 2011 to the Fall of 2015. I worked as a Graduate Teaching Assistant (GTA) at Virginia Tech from Fall 2010 to Spring 2011. Before that, I worked as a lecturer at American International University Bangladesh (AIUB), Dhaka, Bangladesh. I received a B.Sc. in Computer Science & Engineering (CSE) from Bangladesh University of Engineering & Technology (BUET) in 2008.

My ORCID ID: 0000-0002-2049-3178

Research Areas

- Artificial Intelligence & Robotics

Research Interests

Computational Systems Biology, Graph Mining, Machine Learning

Teaching

- CSE 225 Data Structures and Algorithms

- CSE 225L Data Structures and Algorithms Lab
- CSE 373 Design and Analysis of Algorithms
- CSE 115 Programming Language I
- CSE 115L Programming Language I Lab
- CSE 173 Discrete Mathematics
- CSE 299 Junior Design Course
- CSE 498/EEE 498/ETE 498 Internship/Co-op/Directed Research
- CSE 511 Advanced Algorithms
- CSE 325/CSE 425 Concepts of Programming Language
- CSE 491 Special Topics
- CSE 551 Graph Theory

Selected Publications

Journals

- C. L. Poirel, A. Rahman, R. Rodrigues, A. Krishnan, J. R. Addesa, T. M. Murali, "Reconciling Gene Expression Data with Molecular Interaction Networks," *Bioinformatics*, 2013
- A. Rahman, C. L. Poirel, D. J. Badger, C. Estep, T. M. Murali, "Reverse Engineering Molecular Hypergraphs," *IEEE/ACM Transactions on Computational Biology and Bioinformatics (TCBB)*, 2013
- Badiuzzaman Pranto, Sk. Maliha Mehnaz, Esha Binte Mahid, Imran Mahmud Sadman, Ahsanur Rahman, Sifat Momen, "Evaluating Machine Learning Methods for Predicting Diabetes among Female Patients in Bangladesh," *Information*, 2020

Conference Papers

- A. Rahman, S. Jan, H. Kim, B. A. Prakash, and T. M. Murali, "Unstable Communities in Network Ensembles," 16th SIAM conference on Data Mining (SDM), 2016
- A. Rahman, S. Jan, H. Kim, B. A. Prakash, and T. M. Murali, "Mining Unstable Communities from Network Ensembles," 5th IEEE Workshop on Data Mining in Networks, 2015
- A. Rahman, C. L. Poirel, D. J. Badger, and T. M. Murali, "Reverse Engineering Molecular Hypergraphs," *ACM Conference on Bioinformatics, Computational Biology and*

Biomedicine (ACM BCB), Orlando, FL, 2012., 2012

- A. Rahman and M. R. Islam, "An approximation algorithm for bounded degree closest phylogenetic 2nd root problem," International Conference on Computer and Information Technology (ICCIT), 2010
- A. Rahman, "Load Balancing in DHT based P2P Networks," International Conference on Electrical and Computer Engineering (ICECE), 2008
- M. A. Rahman and M. A. Sattar, "A New Approach to Sort Unicode Bengali Text," International Conference on Electrical and Computer Engineering (ICECE), 2008
- M. S. Islam, M.R.J. Mahin, and A. Rahman, "A Data Analysis Pipeline for Identifying Periodic Processes during Drosophila Development," Proceedings of the 2nd International Conference on Advanced Computer Science and Information Systems (ICACSIS), 2020
- M. Chowdhury and A. Rahman, "Predicting Places of Revelation of Quran's Verses," International Conference on Computing & Information Technology (ICCIT 1441), 2020
- F.I. Tahmid, F. Akbar, A. Rahman, "A Smart Cyberbullying Detection and Reporting System," Proceedings of the Seventh International Women in Data Science Conference at Prince Sultan University (WiDS PSU), 2024
- A. Rahman, K. Roy, R. Maliha, T.F. Chowdhury, "A Fast Exact Algorithm to Enumerate Maximal Pseudo-cliques in Large Sparse Graphs," Proceedings of the 30th ACM SIGKDD Conference on Knowledge Discovery and Data Mining, 2024

Book Chapters

- A. Rahman and T. Motahar, "Big Graph Analytics," Invited Chapter in "Data Analytics: Concepts, Techniques and Applications", CRC Press, USA, 2018