

# Mir Tafseer Nayeem

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## Education

- University of Lethbridge (UofL)** **Alberta, Canada**  
*M.Sc. in Computer Science* *September 2015 – October 2018*  
**CGPA:** 4.00/4.00  
**Thesis title:** “Methods of Sentence Extraction, Abstraction and Ordering for Automatic Text Summarization”  
**Supervisor:** Dr. Yllias Chali, Professor, CS Department.  
**Committee members:** Dr. Wendy Osborn, Dr. John Anvik
- Islamic University of Technology (IUT)** **Dhaka, Bangladesh**  
*B.Sc. in Computer Science and IT (CIT)* *January 2008 - January 2012*  
**CGPA:** 3.92/4.00  
**Thesis title:** “Designing a Probabilistic Path Selection Model for Vehicular Networks”  
**Supervisor:** Dr. Muhammad Mahbub Alam, Professor, CSE Department.

## Selected Publications

Full publication list can be accessed from the [Google Scholar](#).

## Conference Publications

- [1] Susmoy Chakraborty\*, **Mir Tafseer Nayeem\***, Wasi Ahmad, “Simple or Complex? Learning to Predict Readability of Bengali Texts”, In Proceedings of the Thirty-Fifth AAAI Conference on Artificial Intelligence (AAAI 2021) [**\*Equal Contribution**]
- [2] Radia Rayan Chowdhury\*, **Mir Tafseer Nayeem\***, Tahsin Tasnim Mim, Md. Saifur Rahman Chowdhury, and Taufiqul Jannat, “Unsupervised Abstractive Summarization of Bengali Text Documents”, In Proceedings of the 16th Conference of the European Chapter of the Association for Computational Linguistics (EACL 2021) [**\*Equal Contribution**]
- [3] **Mir Tafseer Nayeem**, Tanvir Ahmed Fuad, Yllias Chali, “Neural Diverse Abstractive Sentence Compression Generation”, In Proceedings of the 41st European Conference on Information Retrieval (ECIR 2019), Cologne, Germany.

[4] **Mir Tafseer Nayeem**, Tanvir Ahmed Fuad, Yllias Chali, “*Abstractive Unsupervised Multi-Document Summarization using Paraphrastic Sentence Fusion*”, In Proceedings of the 27th International Conference on Computational Linguistics (**COLING 2018**), Santa Fe, New Mexico, USA. [**Oral Presentation**] [[Best Paper Nomination & Area Chair Favorite](#)]

[5] **Mir Tafseer Nayeem**, Yllias Chali, “*Paraphrastic Fusion for Abstractive Multi-Sentence Compression Generation*”, In Proceedings of the 26th ACM International Conference on Information and Knowledge Management (**CIKM 2017**), Singapore.

[6] Yllias Chali, Moin Mahmud Tanvee, **Mir Tafseer Nayeem**, “*Towards Abstractive Multi-Document Summarization Using Submodular Function-Based Framework, Sentence Compression and Merging*”, In Proceedings of the 8th International Joint Conference on Natural Language Processing (**IJCNLP 2017**), Taipei, Taiwan.

[7] **Mir Tafseer Nayeem**, Yllias Chali, “*Extract with Order for Coherent Multi-Document Summarization*”, In Proceedings of TextGraphs-11: The Workshop on Graph-based Methods for Natural Language Processing (**ACL 2017 Workshop**), Vancouver, Canada. [**Oral Presentation**]

[8] **Mir Tafseer Nayeem**, Md Mamunur Rashid Akand, Nazmus Sakib, and Md. Wasi Ul Kabir, “*Design of a Human Interaction Proof (HIP) using Human Cognition in Contextual Natural Conversation*”, In Proceedings of the IEEE 13th International Conference on Cognitive Informatics and Cognitive Computing (**IEEE ICCI\*CC’14**), London, UK. [**Oral Presentation**]

[9] **Mir Tafseer Nayeem**, Md. Saddam Hossain Mukta, Samsuddin Ahmed, Md. Mahbubur Rahman, “*Use of Human Cognition in HIP Design Via EmotIcons to Defend BOT Attacks*”, In Proceedings of the IEEE 15th International Conference on Computational Science and Engineering (**IEEE CSE 2012**), Nicosia, Cyprus. [**Oral Presentation**]

## Journal Publications

[1] Tanvir Ahmed Fuad\*, **Mir Tafseer Nayeem\***, Asif Mahmud, and Yllias Chali, “*Neural Sentence Fusion for Diversity Driven Abstractive Multi-Document Summarization*”, **Computer Speech & Language**, Elsevier 58 (2019): 216-230. [**\*Equal Contribution**]

[2] **Mir Tafseer Nayeem**, Md Mamunur Rashid Akand, Nazmus Sakib, and Md. Wasi Ul Kabir, “*Human Cognition in Automated Turing Test Design*”, **International Journal of Software Science and Computational Intelligence (IJSSCI)** 6.4 (2014): 1-19.

## Major Honors and Awards

- **Best paper nomination** at [COLING 2018](#).
- “**Area Chair Favorite**” paper at [COLING 2018](#).
- **SIGIR** Student Travel Grant [2017]
- School of Graduate Studies (**S.G.S**) Research Dissemination Travel Award [2017]

- Graduate Student's Association (**GSA**) Travel Award [2017]
- School of Graduate Studies (**S.G.S**) Dean's Scholarship, UofL [2015-2017]
- School of Graduate Studies (**S.G.S**) International Tuition Award, UofL [2015-2017]
- Graduate Assistantship (**G.A.**), UofL [2015-2017]
- **IUT-OIC** Full Free Scholarship. [International, 2008-2011]
- Received First Class with Honors in Bachelor of Science (B.Sc) in Computer Science and Information Technology (CIT) [Institutional, 2011]
- HSC Talent Pool Scholarship  
Board of Intermediate and Secondary Education, Cumilla, August 2007.
- SSC Talent Pool Scholarship  
Board of Intermediate and Secondary Education, Cumilla, June 2005.

## Research Experience

For more details of the current projects, please visit the [project](#) section.

- CSE Department, AUST** **Dhaka, Bangladesh**  
*Faculty Research work* *October 2012 – Current*
  - Readability Analysis of Bengali Text Documents.
  - Bengali Document Summarization.
  - Unbiased Summarization of User Reviews.
  - Design of Human Interaction Proof (HIP) to defend BOT attacks using Natural Conversations and Emoticons.
  - Opinion mining from Bangla Micro Blog posts.
- NLP Lab, University of Lethbridge** **Alberta, Canada**  
*Research Assistant* *September 2015 – October 2018*
  - Coherent Extractive and Abstractive Multi-Document Summarization.
  - Abstractive Sentence Fusion and Compression Generation.
  - Reader Level Summary Generation.
  - Sentiment Analysis of App Reviews.
- Networking Research Group, IUT** **Dhaka, Bangladesh**  
*Undergraduate Thesis work* *July 2010 – December 2011*  
**EFD: A Probabilistic Dynamic Path Selection Model for Vehicular Networks**
  - Analyzed and compared the performance of different routing algorithms for Vehicular Ad hoc Networks (VANETs).
  - Developed a probabilistic link delay model for VANETs.

## Teaching Experience

**Faculty Member**, CSE Department,  
 Ahsanullah University of Science and Technology (AUST)  
 Dhaka, Bangladesh.

*October 2012 – Current*

**Courses Taught:** Compiler Design, Theory of Formal Languages & Automata, Artificial Intelligence, Database, Data Structure.

Bangladesh University of Business and Technology (BUBT)  
Dhaka, Bangladesh.

Feb 2012– Sept 2012

**Courses Taught:** C Programming, Data Structure, Numerical Methods.

**Teaching Assistant**, Computer Science Department  
University of Lethbridge (UofL)  
Alberta, Canada.

Sept 2015 – Sept 2017

**Courses Taught:** Fundamental of Programming I & II, Practical Software Development, Artificial Intelligence.

## Related Experience

**Industrial Trainee** at Systech Digital Ltd. Bangladesh

August 2010 - October 2010

Collaborated in a team of 4 to develop an appointment management software using PHP framework CodeIgniter and MySQL.

## Activities & Leadership

- Organizing committee, Commonwealth of Learning (COL) TEL AUST Project [[report](#)]
- Member, Logistics & IT Support Committee, [ICCIT 2020](#)
- **Program Committee Member / Reviewer:** [ICCIT 2020](#), [ICIET 2019](#), [SysCon 2015](#)
- **Organizer and Host**, Intel Nervana AI Academy - Workshop [2017]
- Member, Bangladeshi Students' Organization at the University of Lethbridge (BSOUL).
- Convener, Project Showcasing, AUST CSE WEEK 2018.
- Organizing committee member in the AUST CSE Fest 2013 and 2014, held at AUST.
- Organizing committee member in the BUBT CSE FIESTA 2012, held at BUBT.
- Organizing committee member in the IUT ICT Fest 2011, held at IUT.

## Course Project Works

- **Graduate Course Project** September 2015 – September 2017
  - User Review Analysis of Google Play Store Apps.
  - Modeling Class Scheduling Using Linear Programming.
  - Design of 8-bit ALU & CPU on Xilinx using Verilog HDL.

For more details, please visit the [project](#) section.

- **Undergraduate Course Project** January 2008 – October 2011
  - Developed a multi-module system that recognizes syntactically correct affirmative and negative sentences within a document (*Python*).

- Built a user centered model “**Virtual Shop Guide**” for Online Cloth Store with dynamic fictitious graphic characters.
- A multi-player Game with advanced graphics like fog, lighting, particle system, reflections and collision detection with improved speed and appearance (*OpenGL, C++*).
- A multi-player & multi-level mobile game using NetBeans Game Builder (*J2ME*).
- **JDM**: A Multithreaded Java Download Manager with real life features (*JAVA*).
- Online Cloth Store with advanced features (*ASP.net, JavaScript and AJAX*).
- Swap or Exchange Website integrated with *paypal.com* (*PHP, MySQL*).
- Personal Scheduler and Appointment Manager (*Code Igniter, MySQL*).
- **Case Study**: Implementing and documenting a Web Based Music CD Store using UML.
- Analysis and Design of Routine Management System. (*Visual Basic, MS Access*).
- Cafeteria Management System Software (*Visual Basic, MS Access*).
- Displaying Bangla Characters using Segment Displays (*Software Used: DSCH*).
- Hall Management System Software (*Language: Turbo C with excellent GUI*).

## References

*Available on request.*

[CV updated on January 12, 2021]