

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] **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.
- [3] **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](#)]

[4] **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.

[5] 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.

[6] **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**]

[7] **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**]

[8] **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, IUofL [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, **October 2012 – Current**
Ahsanullah University of Science and Technology (AUST)
Dhaka, Bangladesh.
Courses Taught: Compiler Design, Theory of Formal Languages & Automata, Artificial Intelligence, Database, Data Structure.
- Bangladesh University of Business and Technology (BUBT) **Feb 2012– Sept 2012**
Dhaka, Bangladesh.

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

Teaching Assistant, Computer Science Department

Sept 2015 – Sept 2017

University of Lethbridge (UofL)

Alberta, Canada.

Courses TAed: 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 December 02, 2020]