Mir Tafseer Nayeem

Ph.D. Student in Computing Science, University of Alberta

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Education

University of Alberta Edmonton, Canada
Ph.D. in Computing Science Sept 2021 – Current

Thesis Title: "Human-Centric Modeling of Content"

Supervisor: Prof. Davood Rafiei

Committee members: Prof. Osmar Zaiane, Prof. Lili Mou

University of Lethbridge Lethbridge, Canada

M.Sc. in Computer Science

Thesis Title: "Methods of Sentence Extraction, Abstraction and Ordering for Automatic Text Summarization"

Supervisor: Prof. Yllias Chali

Committee members: Prof. Wendy Osborn, Prof. John Anvik

Islamic University of Technology

Dhaka, Bangladesh

B.Sc. in Computer Science & IT

Thesis Title: "Designing a Probabilistic Path Selection Model for Vehicular Networks"

Supervisor: Prof. Muhammad Mahbub Alam

Awards & Scholarships

Best Resource Paper Award at EMNLP 2024	[2024]
Huawei Ph.D. Fellowship	[2022 - 2027]
Nominated for PhD Early Achievement Award	[2023]
University of Alberta Graduate Recruitment Scholarship	[2021 – 2022]
Area Chair Favorite Paper Award at COLING 2018	[2018]
ACM SIGIR Student Travel Grant	[2017]
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	[2015 – 2017]
School of Graduate Studies (S.G.S) International Tuition Award	[2015 – 2017]
IUT-OIC Full Free Scholarship	[2008 - 2012]

Publications

Full publication list can be accessed from **Google Scholar**. [* = Equal Contribution]

- [1] Mir Tafseer Nayeem and Davood Rafiei, "KidLM: Advancing Language Models for Children Early Insights and Future Directions", The 2024 Conference on Empirical Methods in Natural Language Processing (EMNLP 2024). Link Best Resource Paper Award
- [2] Mohammed Saidul Islam, Raian Rahman, Ahmed Masry*, Md Tahmid Rahman Laskar*, **Mir Tafseer Nayeem***, and Enamul Hoque, "Are Large Vision Language Models up to the Challenge of Chart Comprehension and Reasoning", The 2024 Conference on Empirical Methods in Natural Language Processing (**EMNLP 2024 Findings**). [Link]

- [3] Mir Tafseer Nayeem*, Faisal Tareque Shohan*, Samsul Islam, Abu Ubaida Akash, and Shafiq Joty, "XL-HeadTags: Leveraging Multimodal Retrieval Augmentation for the Multilingual Generation of News Headlines and Tags", 62nd Annual Meeting of the Association for Computational Linguistics (ACL 2024 Findings). [4] Link]
- [4] Mohsinul Kabir*, Mohammed Saidul Islam*, Md Tahmid Rahman Laskar, **Mir Tafseer Nayeem**, M Saiful Bari, and Enamul Hoque, "BenLLMEval: A Comprehensive Evaluation into the Potentials and Pitfalls of Large Language Models on Bengali NLP", Joint International Conference on Computational Linguistics, Language Resources and Evaluation (**COLING 2024**). [\$\subseteq\$ Link]
- [5] Ali Naeim abadi, **Mir Tafseer Nayeem**, and Davood Rafiei, "Product Entity Matching via Tabular Data", 32nd ACM International Conference on Information and Knowledge Management (**CIKM 2023**). [Link]
- [6] Mir Tafseer Nayeem and Davood Rafiei, "On the Role of Reviewer Expertise in Temporal Review Helpfulness Prediction", 17th Conference of the European Chapter of the Association for Computational Linguistics (EACL 2023 Findings). [Link]
- [7] Mir Tafseer Nayeem*, Abu Ubaida Akash*, Faisal Tareque Shohan, and Tanvir Islam, "Shironaam: Bengali News Headline Generation using Auxiliary Information", 17th Conference of the European Chapter of the Association for Computational Linguistics (EACL 2023). [\$\square\$ Link]
- [8] Mir Tafseer Nayeem*, Susmoy Chakraborty*, and Wasi Ahmad, "Simple or Complex? Learning to Predict Readability of Bengali Texts", Thirty-Fifth AAAI Conference on Artificial Intelligence (AAAI 2021). [Link]
- [9] Mir Tafseer Nayeem*, Radia Rayan Chowdhury*, Tahsin Tasnim Mim, Md. Saifur Rahman Chowdhury, and Taufiqul Jannat, "Unsupervised Abstractive Summarization of Bengali Text Documents", 16th Conference of the European Chapter of the Association for Computational Linguistics (EACL 2021). [Link]
- [10] Mir Tafseer Nayeem, Tanvir Ahmed Fuad, and Yllias Chali, "Neural Diverse Abstractive Sentence Compression Generation", 41st European Conference on Information Retrieval (ECIR 2019). [Link]
- [11] Mir Tafseer Nayeem*, Tanvir Ahmed Fuad*, Asif Mahmud, and Yllias Chali, "Neural Sentence Fusion for Diversity Driven Abstractive Multi-Document Summarization", Computer Speech & Language, 2019, 58:216-230. [Link]
- [12] Kazi A Kalpoma, Mostafa A Kamal, **Mir Tafseer Nayeem**, and Shahriar Mahbub, "Report of the Baseline Study on Technology-Enabled Learning at Ahsanullah University of Science and Technology", **Commonwealth of Learning (COL)**, 2019. [Link]
- [13] Sibendu Sarker, Wayne Franz, and **Mir Tafseer Nayeem**, "Automatic Individual Information Aggregation using Publicly Available Social Media Data", 22nd International Conference on Computer and Information Technology (ICCIT 2019). [Link]
- [14] Mir Tafseer Nayeem, Tanvir Ahmed Fuad, and Yllias Chali, "Abstractive Unsupervised Multi-Document Summarization using Paraphrastic Sentence Fusion", 27th International Conference on Computational Linguistics (COLING 2018). Link Parea Chair Favorite Paper Award
- [15] Mir Tafseer Nayeem and Yllias Chali, "Paraphrastic Fusion for Abstractive Multi-Sentence Compression Generation", 26th ACM International Conference on Information and Knowledge Management (CIKM 2017). [Link] ACM SIGIR Student Travel Grant
- [16] Yllias Chali, Moin Mahmud Tanvee, and **Mir Tafseer Nayeem**, "Towards Abstractive Multi-Document Summarization Using Submodular Function-Based Framework, Sentence Compression and Merging", 8th International Joint Conference on Natural Language Processing (IJCNLP 2017). [Link]
- [17] Mir Tafseer Nayeem and Yllias Chali, "Extract with Order for Coherent Multi-Document Summarization", TextGraphs-11: The Workshop on Graph-based Methods for Natural Language Processing (ACL 2017 Workshop). [Link]
- [18] 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", IEEE 13th International Conference on Cognitive Informatics and Cognitive Computing (IEEE ICCI*CC'14). [Link]

- [19] 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), 2014, 6(4):1–19. [Link]
- [20] Mir Tafseer Nayeem, Md. Saddam Hossain Mukta, Samsuddin Ahmed, and Md. Mahbubur Rahman, "Use of Human Cognition in HIP Design Via EmotIcons to Defend BOT Attacks", IEEE 15th International Conference on Computational Science and Engineering (IEEE CSE 2012). [Link]
- [21] Khandaker Tabin Hasan, Md. Saddam Hossain Mukta, Mir Tafseer Nayeem, and Zahid Hasan, "Event-based Content Management by Spontaneous Metadata Generation and Diffusion", IEEE 13th International Symposium on Computational Intelligence and Informatics (IEEE CINTI 2012). [\$\frac{1}{2}\text{Link}]
- [22] Fausto Giunchiglia, Md Saddam Hossain Mukta, **Mir Tafseer Nayeem**, and Khandaker Tabin Hasan, "Semantic Enabled Role Based Social Network", International Journal of Intelligent Systems and Applications (IJISA), 2012, 4(12):1–11. [Link]
- [23] Khandaker Tabin Hasan, Md. Saddam Hossain Mukta, **Mir Tafseer Nayeem**, and Sharmin Afsah, "Publishing Knowledge and Transformation of Conventional Web into Semantic Web using Metadata", International Journal of Computer Applications (IJCA), 2012, 54(13):41–48. [Link]
- [24] Md Rifat Ahmmad Rashid, **Mir Tafseer Nayeem**, Kamrul Hasan Talukder, and Md Saddam Hossain Mukta, "A Progressive Image Transmission Method Based on Discrete Wavelet Transform (DWT)", International Journal of Image, Graphics and Signal Processing (IJIGSP), 2012, 4(10):18–24. [Link]
- [25] Moin Mahmud Tanvee, **Mir Tafseer Nayeem**, and Md Mahmudul Hasan Rafee, "Move & select: 2-layer CAPTCHA Based on Cognitive Psychology for Securing Web Services", International Journal of Video & Image Processing and Network Security (IJVIPNS/IJENS), 2011, 11(5):9–17. [Link]

Activities

Services

Program Committee/Reviewer

- 2025: NAACL

- 2024: ACL, EMNLP, NAACL, EACL, SIGIR, WSDM

2023: SIGIR, KDD, WSDM, CIKM2022: SIGIR, KDD, CIKM, ICDE

Invited Talks

- Talk on Introduction to NLTK at University of Lethbridge (UofL), AB, Canada. [2017]

Guest Lecturer in CPSC 3750 - Artificial Intelligence course, UofL, AB, Canada.

🥵 Leadership

Lab Manager, Database Lab, University of Alberta, Edmonton, AB, Canada.
 [2022 - Current]

Founding Admin of a Discord server comprising approximately 4,500+ members dedicated to assisting prospective students with grad school applications.

- Member, Logistics & IT Support Committee, ICCIT 2020 Conference.

- Organizing committee, Commonwealth of Learning (COL) TEL AUST Project [report].

Organizer and Host, Intel Nervana Al Academy - Workshop.

Convener, Project Showcasing, AUST CSE WEEK.

[2018]

- Organizing committee member, AUST CSE Fest.

[2013, 2014]

- Organizing committee member, BUBT CSE FIESTA.

[2012]

- Organizing committee member, IUT ICT Fest.

[2011]

[2017]

[2017]

Experience

Graduate Teaching Assistant

Sept 2021 - Current

University of Alberta, Computing Science Department

Courses TAed:

- CMPUT 101 Introduction to Computing
- CMPUT 291 Introduction to File and Database Management

Edmonton, Canada

Faculty Member, CSE Department

Oct 2018 - Jul 2021

Ahsanullah University of Science and Technology (AUST)

Dhaka, Bangladesh

Courses Taught:

- CSE 4237 & 4238 Soft Computing with Lab
- CSE 3223 & 3224 Information System Design and Software Engineering with Lab
- CSE 3104 Database Lab
- CSE 1108 Introduction to Computer Systems

Graduate Teaching Assistant

Sept 2015 - Sept 2017

Lethbridge, Canada

University of Lethbridge, Computer Science Department

Courses TAed:

- CPSC 1620 & 2620 Fundamental of Programming I & II
- CPSC 2720 Practical Software Development

Lecturer, CSE Department

Oct 2012 - Aug 2015

Dhaka, Bangladesh

Ahsanullah University of Science and Technology (AUST)

Courses Taught:

- CSE 4129 & CSE 4130 Formal Languages & Compilers with Lab
- CSE 4108 Artificial Intelligence Lab
- CSE 2104 Data Structures Lab

Lecturer, CSE Department

Feb 2012 - Sept 2012

Bangladesh University of Business and Technology (BUBT)

Dhaka, Bangladesh

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

Aug 2010 - Oct 2010

Industrial TraineeSystech Digital Ltd.

Dhaka, Bangladesh

 Collaborated with a team of four to develop appointment management software using the PHP framework Codelgniter and MySQL.



Available on request.

[CV updated on February 7, 2025]