Md Mahadi Hasan Nahid

Graduate Student, University of Alberta, Canada

♦ Website | ♠ mahadi-nahid | in mahadi-nahid | ♦ Google Scholar | ✓ mnahid@ualberta.ca

RESEARCH INTERESTS

Information Retrieval (IR), Natural Language Processing (NLP), Large Language Models (LLM)

EDUCATION

MSc (Thesis) in Computing Science, University of Alberta, Canada

Sep 2022 - Present

- GPA: 4.00/4.00; Research Area: Natural Language Generation and Complex Reasoning
- Achievements: Alberta Innovates Graduate Student Scholarship (AIGSS), Sep 2023; Alberta Graduate Excellence Scholarship (AEGS), Sep 2023; University of Alberta Graduate Recruitment Scholarship, Sep 2022

BSc (Engg.) in CSE, Shahjalal Univ. of Sci. and Tech. (SUST), Bangladesh Jan 2011 - Dec 2015

- GPA: 3.82/4.00; Class Position: 1st / 54 Students
- Achievements: Vice Chancellor Award 2020, Prime Minister Gold Medal 2016

SELECTED PUBLICATIONS

- Das, K., Srinivas, M. N., Shahrear, P., Rahman, S. S., Nahid, M. M., & Murthy, B. S. N. (2023). Transmission Dynamics and Control of COVID-19: A Mathematical Modelling Study. Journal of Applied Nonlinear Dynamics, 12(02), 405-425.
- Shahrear, P., Rahman, S. S., & Nahid, M. M. H. (2021). Prediction and mathematical analysis of the outbreak of coronavirus (COVID-19) in Bangladesh. Results in Applied Mathematics, 10, 100145.
- Foysal, T. A., Mahadi, M. A., Nahid, M. M. H., & Tasnim, A. (2021, November). Bangla-ExtraSum: Comparative Analysis of Different Methods in Automated Extractive Bengali Text Summarization. In 2021 5th International Conference on Electrical Engineering and Information Communication Technology (ICEEICT) (pp. 1-6). IEEE.
- Azad, M. A., Singha, H. S., & Nahid, M. M. H. (2021, August). Zilla-64: A Bangla Handwritten Word Dataset Of 64 DistrictsName of Bangladesh and Recognition Using Holistic Approach. In 2021 International Conference on Science & Contemporary Technologies (ICSCT) (pp. 1-6). IEEE.
- Sarker, S., Islam, M. E., Saurav, J. R., & Nahid, M. M. H. (2020, November). Word completion and sequence prediction in bangla language using trie and a hybrid approach of sequential LSTM and N-gram. In 2020 2nd International Conference on Advanced Information and Communication Technology (ICAICT) (pp. 162-167). IEEE
- Azad, M. A., Singha, H. S., & Nahid, M. M. H. (2020, November). Bangla handwritten character recognition using deep convolutional autoencoder neural network. In 2020 2nd International Conference on Advanced Information and Communication Technology (ICAICT) (pp. 295-300). IEEE. (Honorable Mention Award)
- Sarker, S., Monisha, S. T. A., & Nahid, M. M. H. (2019, September). Bengali question answering system for factoid questions: A statistical approach. In 2019 International Conference on Bangla Speech and Language Processing (ICBSLP) (pp. 1-5). IEEE.
- Monisha, S. T. A., Sarker, S., & Nahid, M. M. H. (2019, May). Classification of bengali questions towards a
 factoid question answering system. In 2019 1st International Conference on Advances in Science, Engineering
 and Robotics Technology (ICASERT) (pp. 1-5). IEEE.
- Khan, S., Kubra, K. T., & Nahid, M. M. H. (2018, December). Improving answer extraction for bangali q/a system using anaphora-cataphora resolution. In 2018 International Conference on Innovation in Engineering and Technology (ICIET) (pp. 1-6). IEEE.
- Ritu, Z. S., Nowshin, N., Nahid, M. M. H., & Ismail, S. (2018, September). Performance analysis of different word embedding models on bangla language. In 2018 International Conference on Bangla Speech and Language

Processing (ICBSLP) (pp. 1-5). IEEE.

- Nahid, M. M. H., Purkaystha, B., & Islam, M. S. (2017, December). Bengali speech recognition: A double layered LSTM-RNN approach. In 2017 20th international conference of computer and information technology (ICCIT) (pp. 1-6). IEEE.
- Nahid, M. M. H., Islam, M. A., & Islam, M. S. (2016, May). A noble approach for recognizing bangla real number automatically using cmu sphinx4. In 2016 5th international conference on informatics, electronics and vision (ICIEV) (pp. 844-849). IEEE.

Conference Review

Subreviewer SIGIR 2023, CIKM 2023, ICBSLP 2019, ICERIE 2019

ACHIEVEMENTS AND AWARDS

Alberta Innovates Graduate Student Scholarship (AIGSS)

Sep 2023 - Aug 2024

– Amount: \$ 26000

Alberta Graduate Excellence Scholarship (AEGS)

Sep 2023 - Mar 2024

– Amount: \$ 12000

Alberta Machine Intelligence Institute (Amii) Talent Bursary, Amii

2023

- Upperbound AI Conference, 2023

University of Alberta Graduate Recruitment Scholarship

Sep 2022

- Awarded by the University of Alberta for excellent academic background.

Runner Up Award - AIForBangla season 1

Feb 2022

- National project contest funded by Bangladesh gov. for Bangla NLP research.
- Awarded for creating 'SUST Bangla NLP Toolkit (SBNLTK)' as project mentor. [link]

Vice Chancellor Award - 2020

2020

 For exceptional academic performance and ranking as the top student in the School of Applied Sciences and Technology at SUST.

IEEE Honorable Mention Award, Awarded by CAICT Conference 2020

2020

– Our paper was one of the top 5 papers at this conference in the domain of NLP-ML.

Prime Minister Gold Medal - 2016

2018

- 141 students nationwide recognized for top marks in their faculties.[link (page-23)]

ICPC World Final Contest

2018 - 2019

- Beijing, China 2018: 56th Position, Participated as Co-trainer.
- Porto, Portugal 2019: Honorable Mention, Participated as Co-trainer.

University Scholarship from SUST

2012 - 2015

- Awarded by SUST, for achieving the best results for every academic year.

Bangladesh Government's Ministry of Education Scholarship

2011

- Received this scholarship for the academic result of the HSC Board Examination.

TEACHING AND RESEARCH EXPERIENCE

Graduate Teaching Assistant, University of Alberta, Canada

Sep 2022 - present

- Course: CMPUT 291 - File and Database Management (F22, W23 and F23, W24)

Graduate Research Assistant Fellow, University of Alberta, Canada

May 2023 - Aug 2023

- Graduate Research Assistant Fellowship (GRAF), Summer 2023

Faculty Member, Shahjalal Univ. of Sci. and Tech. (SUST), Bangladesh

Sep 2017 - Aug 2022

- Course: OOP, Communication Engineering, Introduction to Computer Language

Research Coordinator, SUST NLP Lab

Jan 2018 - Aug 2022

I collaborate research projects on Bangla QA and Bangla Document Summarization.

Research Assistant, Department of Computer Science and Engineering, SUST Apr 2013 - Dec 2013

- Supervisor: Professor Dr. M. Abdullah Al Mumin
- Contributions: Building an English-Bangla Parallel Corpus for Statistical Machine Translation.

OTHER EXPERIENCE

Core Member, Center for Research, Testing and Consultancy, CSE, SUST Jan 2020 - Aug 2022

- **Project:** Digital Sylhet City Automation of Sylhet M. A. G. Osmani Medical College Hospital (the largest government hospital in Sylhet Division)
- Role: I helped the team with requirements engineering and designing the product's architecture.

SELECTED PROJECTS AND GRANTS

A New Approach for Bengali Document Summarization

Aug 2020 - Jul 2021

- Role: Co-investigator; Grant Amount: BDT 175,000 (USD \$ 2065)
- Project Code: AS/2020/1/30, SUST Research Center (2020-21)

Ankur: A VR based E-Learning application to train people with Autism

Aug 2019 - Jul 2020

- Role: Principle Investigator; Grant Amount: BDT 150,000 (USD \$ 1700)
- Project Code: AS/2019/1/19, SUST Research Center (2019-20)

SUST Admission Chatbot

Aug 2018 - Jul 2019

- Role: Co-Investigator; Grant Amount: BDT 150,000 (USD \$ 1700)
- Project Code: AS/2018/1/10, SUST Research Center (2018-19)

SKILLS

Language Python, C/C++, Java, SQL

Frameworks PyTorch, Tensorflow, Pandas, Keras Utilities Git, Jupyter Notebook, LaTex

Communication English, Bengali

Extra Curricular Activities

Undergraduate Student Mentor Department of CSE, SUST (Sep 2021-Aug 2022)

Advisor SUST ACM Student Chapter (Sep 2019-Aug 2022)

Program Committee Member ICBSLP Conference (2018, 2019)

Organizer SUST CSE Curnival (2018, 2019); SUST Techfest (2019)

Executive Member CSE Alumni Association, SUST (2018-2021)

Last updated: March 31, 2024