Department of Computer Science and Engineering
Khulna University of Engineering & Technology
Khulna - 9203,Tel:041-769471 (191);Fax :041-774403

Biography

Al-Mahmud
Associate Professor
Research Area My research areas are (i) Natural Language Processing, (ii) Machine Learning, (iii) Deep Learning, (iv) Evolutionary Computation, and (v) Bio-inspired Computing.

Welcome to my site. I am an Associate Professor of Dept. of CSE, KUET. I was also a Lecturer and an Assistant Professor in this department. I completed my B.Sc. (Engg.) degree as 1st class 1st from Dept. of CSE, KUET in 2010. I also completed my M.Sc. (Engg.) degree with a CGPA of 4.00 (out of 4.00) from Dept. of CSE, KUET in 2015. I was a JASSO scholarship and JST SPRING grant awardee in Japan. I was invited by the Faculty of Science as a vising researcher at Ontario Tech University, Canada in 2024. I am interested in the research fields: Natural Language Processing, Machine Learning, Deep Learning, Evolutionary Algorithms, and Bio-inspired Computing. Currently, I am pursuing a Ph.D. in the Dept. of Artificial Intelligence at Kyushu Institute of Technology, Japan. I cordially invite researchers who are interested in my research fields to perform collaborative research.

Education

M.Sc. (Engg.) in CSE
   KUET,(2015)Achievement:CGPA 4.00 out of 4.00
B.Sc. (Engg.) in CSE
   KUET,(2010)Group: CSE,Merit Position: 1st,Achievement:First Class First

Research Interest

My research areas are (i) Natural Language Processing, (ii) Machine Learning, (iii) Deep Learning, (iv) Evolutionary Computation, and (v) Bio-inspired Computing.

Publication

Books

1. Al-Mahmud,A. ,Sarker,B. and Hasan,a. K. A. (2013) ," Parsing Bangla Grammar Using Context Free Grammar (CFG)", **Technical Challenges and Design Issues in Bangla Language Processing** , ISBN:9781466639706,IGI Global

Journals

7. (2024) **International Journal of Computer Science and Information Technology (IJCSIT)**, AIRCC, vol16(3)

6. (2023) , " Dataset Construction and Opinion Holder Detection Using Pre-trained Models," **International Journal of Service and Knowledge Management (IJSKM)**, vol7(2), no.2, pp.48-64

5. (2021.) , " Highly Constrained University Class Scheduling Using Ant Colony Optimization," **International Journal of Computer Science & Information Technology (IJCSIT)**, AIRCC Publication Corporation, vol3, no.1

4. H,A. M. A. , T,S. , R,S. M. I. and Al-Mahmud,A. (2017.) , " Constructive and Clustering Methods to Solve Capacitated Vehicle Routing Problem," **Oriental Journal of Computer Science and Technology**, vol10, no.2

1. Hasan,K. A. ,Al-Mahmud,A. and Saha,A. M. a. A. (2011.) , " Recognizing Bangla Grammar Using Predictive Parser," **International Journal of Computer Science & Information Technology (IJCSIT)**, vol3(6), pp. 61 - 73.

Conference

17. (2023) , "Intent Analysis from Reviews in the Bangla Language," **11th International Symposium on Applied Engineering and Sciences (SAES2023)** , Universiti Putra Malaysia (UPM) Press

16. Junaed,A. B. M. ,Akhand,M. A. H. and Murase,A. a. K. (2013) , "Multi-Producer Group Search Optimizer for Function Optimization," **International Conference on Informatics, Electronics and Vision (ICIEV)**

15. Rahaman,S. S. ,Al-Mahmud,A. and Akhand,M. R. I. a. M. A. H. (2013) , "Design and Development of a Bengali Unicode Font Converter," **International Conference on Informatics, Electronics and Vision (ICIEV)**

14. (2023.) , "Dataset Construction and Evaluation for Aspect-Opinion Extraction in Bangla Fine-grained Sentiment Analysis," **4th International Conference on Data Science and Applications (ICDSA 2023)** , SCOPUS Indexed Springer Lecture Notes in Networks and Systems

13. (2023.) , "Demonstration of Effectiveness of Nativeness in Stepwise Learning by Performing Sentiment Analysis," **International Conference on Next-Generation Computing, IoT and Machine Learning (NCIM 2023)** , IEEE Xplore Digital Library

12. Sen,O. and Al-Mahmud,P. R. a. A. (2023.) , "A Novel Bangla Spoken Numerals Recognition System Using Convolutional Neural Network.," **International Conference on Machine Intelligence and Emerging Technologies (MIET 2022)** , Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering, pp.344-357

11. (2022.) , "Dataset Construction and Classification Based on Pre-trained Models for Opinion Holder Detection," **11th International Congress on Advanced Applied Informatics (IIAI-AAI)** , IEEE Xplore Digital Library, pp.65-70

10. Al-Mahmud,A. and Kamruzzaman,M. M. a. S. (2021.) , "GRU-based Encoder-Decoder Attention Model for English to Bangla Translation on Novel Dataset," **5th International Conference on Electrical Information and Communication Technology (EICT)** , IEEE Xplore Digital Library, pp.1-6

9. Khalil,A. A. and Ahmed,A. a. A. (2021.) , "FICBIT: An improved Fractal Image Compression using Bio-Inspired Techniques," **5th International Conference on Electrical Information and Communication Technology (EICT)** , IEEE Xplore Digital Library, pp.1-6

8. Sen,O. and Roy,A. a. P. (2021.) , "A Convolutional Neural Network Based Approach to Recognize Bangla Spoken Digits from Speech

Signal," ***International Conference on Electronics, Communications and Information Technology (ICECIT)*** , IEEE Xplore Digital Library, pp.1-4

7. Al-Mahmud,A. and Rahman,A. T. a. S. (2021.) , "Handwritten English Character and Digit Recognition," ***International Conference on Electronics, Communications and Information Technology (ICECIT)*** , IEEE Xplore Digital Library, pp.1-4

6. Bhattacharjee,I. and Mahmud,A. a. T. (2021.) , "Diabetic Retinopathy Classification from Retinal Images using Machine Learning Approaches," ***International Conference on Advanced Engineering, Technology and Applications (ICAETA)*** , Proceeding Book 2021, pp.29-33

5. Akhand,M. A. H. ,Jannat,Z. and Al-Mahmud,T. D. a. A. (19-20 December, 2015.) , "Optimization of Capacitated Vehicle Routing Problem using Producer-Scrounger Method," ***IEEE International WIE Conference on Electrical and Computer Engineering (WIECON-ECE)*** , pp.297-300

4. Akhand,M. A. H. ,Jannat,Z. and Al-Mahmud,T. S. a. A. (10-12 December, 2015.) , "Solving Capacitated Vehicle Routing Problem with Route Optimization using Swarm Intelligence," ***International Conference on Electrical Information and Communication Technology (EICT)*** , IEEE Xplore Digital Library , pp.112-117

3. (23-24 May,2014.) , "ACO with GA Operators for Solving University Class Scheduling Problem with Flexible Preferences," ***International Conference on Informatics, Electronics & Vision (ICIEV)*** , IEEE Xplore Digital Library