

## **Dr. Mukta Majumder**

### **Ph.D, M. Tech, B. Tech**

Assistant Professor  
Department of Computer Science and Application,  
University of North Bengal  
Siliguri, West Bengal, India-734013  
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### **Teaching Experience:** 6+ Years

1. Assistant Professor, Computer Centre, Vidyasagar University, Midnapore, India, from 22/12/2014 to 17/10/2017.
2. Assistant Professor, Computer Science & Application, University of North Bengal, Siliguri, India, from 18/10/2017 to present.

### **Research Interest:**

Natural Language Processing, Machine Learning, ICT Based Teaching-Learning & Assessment, Microfluidic System & Digital Biochip etc.

### **Field of Specialization:**

Natural Language Processing, E-Commerce, Software Engineering, Graph Theory, Automata Theory & Formal Languages.

### **Invited Talk**

1. **Natural Language Processing and Educational Application**, One Week Faculty Development Program on “Computational Intelligence Techniques for Machine Learning”, at Jaypee University of Information Technology, Waknaghat-173234, 31st August to 5th September 2020.
2. One day webinar on **Application of Natural Language Processing in Education Technology**, 22<sup>nd</sup> August 2020 in collaboration with Department of Computer Science and Engineering, Sister Nivedita University, New Town, Kolkata.

**Ph.D Thesis Supervised:** Completed: 0      Thesis Submitted: 0      Ongoing: 2

**M. Tech Thesis Supervised:** 1

### **Member of Professional Bodies:**

ACL (Association for Computational Linguistics): Category- Faculty Member

### **Reviewer of Journal**

1. Educational Research (ISSN:2141-5161) [<http://www.interestjournals.org/ER>]
2. E-Learning and Digital Media, SAGE (ISSN: 20427530) [<http://ldm.sagepub.com/>]
3. IETE Journal of Research, Taylor & Francis (ISSN: 0377-2063, e-ISSN: 0974-780X) [<http://www.tandfonline.com/loi/tijr20>]
4. Computer Applications in Engineering Education, Wiley (Online ISSN:1099-0542) [<https://onlinelibrary.wiley.com/journal/10990542>]
5. Intelligent Decision Technologies, IOS Press (ISSN print: 1872-4981, e-ISSN: 1875-8843) [<https://www.iospress.nl/journal/intelligent-decision-technologies/>]

### **Member of Program Committee and Reviewer of Conference**

1. International Conference on Electrical, Electronics and Mechatronics (ICEEM 2015)
2. International Conference on Fuzzy Systems and Data Mining (FSDM 2016, 2017, 2018)
3. International Conference on Communication, Devices and Computing (ICCDC 2017)
4. First International Conference on Advanced Computational and Communication Paradigms (ICACCP 2017)
5. 2<sup>nd</sup> International Conference on Intelligent and Cloud Computing (ICICC-2021)
6. International Symposium on Artificial Intelligence (ISAI-2022)

**Publications:** 25, Journals – 16, International Conferences Proceedings and Book Chapters – 9

#### **(a) Paper published/Accepted in Journals (Selected: SCI/SCIE/SSCI/ESCI (Web of Science)/Scopus Indexed only)**

1. Dutta R, **Majumder M.** Attention-based Bidirectional LSTM with Embedding Technique for classification of COVID-19 articles. *Intelligent Decision Technologies*, **IOS Press**. (Accepted).
2. Das, B., **Majumder, M.**, Phadikar, S., & Sekh, A. A. (2021). Multiple-choice question generation with auto-generated distractors for computer-assisted educational assessment. *Multimedia Tools and Applications*, 80, 1-19, **Springer (Impact Factor: 2.517)**
3. Das, B., **Majumder, M.**, Phadikar, S., & Sekh, A. A. (2021). Automatic question generation and answer assessment: a survey. *Research and Practice in Technology Enhanced Learning*, 16(1), 1-15, **Springer**
4. Das, B., Sekh, A. A., **Majumder, M.**, & Phadikar, S. (2021). Can deep learning solve a preschool image understanding problem? *Neural Computing and Applications*, 33, 1-11, **Springer. (Impact Factor: 5.573)**
5. Maity, S., Das, N., **Majumder, M.**, & Dasadhikary, D. R. (2021). Word Embedding and String-Matching Techniques for Automobile Entity Name Identification from Web Reviews. *EAI Transactions on Scalable Information Systems*, 8, e10.
6. Saha, B., & **Majumder, M.** (2021). An optimized knight traversal technique to detect multiple faults and Module Sequence Graph based reconfiguration of microfluidic biochip. *IET Computers & Digital Techniques*, 15(1), 1-11, **Wiley. (Impact Factor: 0.818)**
7. Saha, S.K., Prakash, A. & **Majumder, M.** (2019) “Similar query was answered earlier”: processing of patient authored text for retrieving relevant contents from health discussion forum. *Health Inf Sci Syst* 7 (4), 1-9, **Springer**
8. Das, B., **Majumder, M.**, Phadikar, S., & Sekh, A. A. (2019). Automatic generation of fill-in-the-blank question with corpus-based distractors for e-assessment to enhance learning. *Computer Applications in Engineering Education*, 27(6), 1485-1495, **Wiley (Impact Factor:1.532)**
9. Saha, A., & **Majumder, M.** (2019). An efficient technique for double faults detection and their locations identification in digital microfluidic biochip. *International Journal of Automation and Smart Technology*, 9(2), 65-75.
10. Saha SK, **Majumder M.** Development of a Hindi Named Entity Recognition System without Using Manually Annotated Training Corpus. *International Arab Journal of Information Technology*, Vol. 15 (6), 2018, pp. 1088-1098 **(Impact Factor: 0.654)**
11. Das B, **Majumder M**, Phadikar S. A Novel System for Generating Simple Sentences from Complex and Compound Sentences. *International Journal of Modern Education and Computer Science*. Vol. 10(1), 2018, pp. 57-64.
12. Das B, **Majumder M.** Factual open cloze question generation for assessment of learner’s knowledge. *International Journal of Educational Technology in Higher Education*, Vol. 14(1), 2017, pp. 1-12, **Springer (Impact Factor 5.361)**
13. **Majumder M**, Saha SK. Automatic Selection of Informative Sentences: The Sentences That Can Generate Multiple Choice Questions. *Knowledge Management & E-Learning: An International Journal*, Vol. 6 (4), 2014, pp. 377-391
14. **Majumder M**, Saha SK. Use of global context for handling noisy names in discussion texts of a homeopathy discussion forum. *Knowledge Management & E-Learning: An International Journal*, Vol. 6 (1), 2014, pp. 18-29
15. **Majumder M**, Das N, Saha SK. A Novel Technique for Multiple Faults and their Locations Detection and Start Electrode Selection in Microfluidic Digital Biochip. *Journal of Innovative Optical Health Sciences*, Vol. 6(04), 2013, pp. 1350032-1–1350032-8, **World Scientific (Impact Factor: 1.77)**

**(b) Papers in International Conferences and Book Chapters (Selected)**

1. Das, B., Sekh, A. A., **Majumder, M.**, & Phadikar, S. ABID: Attention-based Bengali Image Description. Lecture Notes in Electrical Engineering (LNEE), Book Series, **Springer**, ICCDC 2021 (Accepted)
2. Dutta R., Jana B., **Majumder M.** (2020) Semantic Similarity and Word-Net Based Web News Classification. In: Dawn S., Balas V., Esposito A., Gope S. (eds) Intelligent Techniques and Applications in Science and Technology. ICIMSAT. Learning and Analytics in Intelligent Systems, vol 12. **Springer**, Cham. [https://doi.org/10.1007/978-3-030-42363-6\\_85](https://doi.org/10.1007/978-3-030-42363-6_85)
3. Dutta R, Jana B, **Majumder M.** Representation and Exploring the Semantic Organization of Bangla Word in the Mental Lexicon: Evidence from Cross-Modal Priming Experiments and Vector Space Model. In Communication, Devices, and Computing, 2017, pp. 273-281, **Springer**.
4. Dutta R, Jana B, **Majumder M.** Exploring the semantic organization of Bangla words in the mental lexicon. Procedia Computer Science, 115, 2017, pp. 556-562, **Elsevier**
5. **Majumder M.**, Dolai U, Bhattacharya A. An efficient novel single fault and its location detection technique using multiple droplets in a Digital Microfluidic Biochip. 11th International Conference on Intelligent Systems and Control (ISCO), 2017, pp. 119-124, **IEEE**.
6. **Majumder M.**, Saha S.K. A system for generating multiple choice questions: With a novel approach for sentence selection. In Proceedings of the 2nd Workshop on Natural Language Processing Techniques for Educational Applications, 2015, pp. 64-72, **ACL**.
7. **Majumder M.**, Barman U, Prasad R, Saurabh K, Saha SK. A novel technique for name identification from homeopathy diagnosis discussion forum. Procedia Technology, 6, 2012, pp. 379-386, **Elsevier**.
8. **Majumder M.**, Ray S, Roy S. A multi droplets detection technique for single-fault in digital micro-fluidic biochip. In Computational Intelligence and Information Technology, 2011, pp. 506-511, **Springer**.

**Professional Development Program and Workshop Attended:**

1. Short term course on Advance Algorithms and their Applications, Indian School of Mines, Dhanbad, 2<sup>nd</sup> to 5<sup>th</sup> April 2012
2. Short Term Training Program on Basic Matlab, Birla Institute of Technology, Mesra, Ranchi, 24<sup>th</sup> June to 1<sup>st</sup> July 2013
3. Text Mining Workshop 2014, ISI, Kolkata, India, 6<sup>th</sup> to 8<sup>th</sup> January 2014
4. Training Program on Teaching With Technology, Conducted by Microsoft at Vidyasagar University, 1<sup>st</sup> to 9<sup>th</sup> October 2015.
5. MHRD Sponsored One-day training programme to upload data in “All India Survey on Higher Education (AISHE)” Portal, Organized by Vidyasagar University, 3<sup>rd</sup> February 2016
6. Refreshers Course in Computer Science, UGC, HRDC, University of North Bengal, Siliguri, India, from 04/01/2019 to 24/01/2019
7. 37<sup>th</sup> Orientation Programme (OP-NBU-37), 2019, UGC, HRDC, University of North Bengal, Siliguri, India, from 20/02/19 to 19/03/2019

**Scholarship/ Fellowship and Award Received:**

1. Qualified GATE twice 2009 & 2010.
2. Scholarship for Pursuing M. Tech from AICTE
3. Institute Fellowship for Pursuing Ph.D from BIT
4. UGC NET June 2013, in Computer Science & Application for eligibility of Lectureship or Assistant Professorship.

**Personal Information:**

Date of Birth: 21- 03-1988

Marital Status: Married

Place: Siliguri

Mukta Majumder

Date: 17/09/2021

[Signature]