

Dr. ANINDITA BORAH

C/O Mr. Durga Prasad Borah
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Vision and Objective

To gain employment with an institution that offers me a consistently positive atmosphere for enhancing my knowledge, skills and capacity building in my professional life.

Academic Details

Qualification	Institution	Board/ University	Year	Percentage/CGPA
PhD	Tezpur University	Tezpur University	2020	8.75 (CGPA)
MTech (Information Technology)	Institute of Science & Technology	Gauhati University	2013	8.47 (CGPA)
B.E. (Computer Science & Engineering)	Girijananda Chowdhury Institute of Management & Technology (GIMT)	Gauhati University	2011	74.2%
AISSCE(12th)	Kendriya Vidyalaya, Khanapara	CBSE	2006	68.6%
AISSE (10th)	Maharishi VidyaMandir, Silpukhuri	CBSE	2004	86.6%

Projects Undertaken

1. Graduation (Bachelor of Engineering):

- Developed a **Multichannel Data Acquisition System** that will collect information about temperature, pressure, humidity, light intensity of a particular location.

2. Post Graduation (Master of Technology):

- **Research Area:** Computational Biology
- **Topic:** Discovering High Variation Biclusters from Gene Expression Data using Biclustering Technique

Doctor of Philosophy, PhD

- **Date of Enrollment:** 16-01-2015
- **Date of Completion:** 29-12-2020
- **Research Area:** Data Mining
- **Topic:** Developing Effective Rare Association Rule Mining Techniques
- **Advisor:** Dr. Bhabesh Nath

Post Doctoral Research

- **Institute :** Indian Institute of Technology Guwahati
- **Date of Enrollment:** 19-10-2020
- **Date of Completion:** Ongoing
- **Research Area:** Machine Learning, Social Network Analysis, Computational Social Science
- **Topic:** Twitter based Investigation of Political Polarization and Party Switching in Indian Politics
- **Mentor:** Dr. Sanasam Ranbir Singh

Publications

1. **A. Borah & B. Nath**, “Identifying Risk Factors for Adverse Diseases using Dynamic Rare Association Rule Mining”, Expert Systems with Applications, 113, pp-233-263, Elsevier, 2018 (SCI Indexed, Impact Factor: 8.665).
2. **A. Borah & B. Nath**, “Incremental Rare Pattern based Approach for Identifying Outliers in Medical Data”, Applied Soft Computing, 85, 105824, Elsevier, 2019 (SCI Indexed, Impact Factor: 8.263).
3. **A. Borah & B. Nath**, “Comparative Evaluation of Pattern Mining Techniques: An Empirical Study”, Complex & Intelligent Systems, 7(2), 589-619, Springer, 2020 (SCI Indexed, Impact Factor: 6.859).
4. **A. Borah & B. Nath**, “Rare Pattern Mining: Challenges and Future Perspectives”, Complex & Intelligent Systems, 5, pp-1-23, Springer, 2018 (SCI Indexed, Impact Factor: 6.859).

5. **A. Borah**, “Detecting COVID-19 Vaccine Hesitancy in India: A Multimodal Transformer based Approach”, *Journal of Intelligent Information Systems*, 59(1), Springer, 2022. (SCI Indexed, Impact Factor: 2.504)
6. **A. Borah** & B. Nath, “Rare Association Rule Mining from Incremental Databases” *Pattern Analysis and Applications*, 22, pp-1-22, Springer, 2018 (SCI Indexed, Impact Factor: 2.307).
7. **A. Borah** & B. Nath, “An Efficient Method for Mining Rare Association Rules: A Case Study on Air Pollution”, *International Journal on Artificial Intelligence Tools*, 30(4), World Scientific, 2021 (SCI Indexed, Impact Factor: 1.208).
8. **A. Borah** & S R Singh, “Investigating political polarization in India through the lens of Twitter”, *Social Network Analysis and Mining*, 12(1), pp. 1-26, Springer, 2022 (Scopus and ESCI Indexed).
9. **A. Borah** & B. Nath, “Tree Based Frequent and Rare Pattern Mining Techniques: A Comprehensive Structural and Empirical Analysis”, *Springer Nature Applied Sciences*, 1(9), 972, Springer, 2019 (Scopus and ESCI Indexed).
10. **A. Borah** & B. Nath, “Rare Association Rule Mining: A Systematic Review”, *International Journal of Knowledge Engineering and Data Mining*, 4, pp- 204-258, Inderscience, 2017.
11. **A. Borah** & B. Nath, “Mining Rare Patterns using Hyper-Linked Data Structure”, 7th International Conference on Pattern Recognition and Machine Intelligence (PReMI), *Lecture Notes in Computer Science*, pp- 467-472, Springer, 2017.
12. **A. Borah** & B. Nath, “Performance Analysis of Tree Based Approaches for Pattern Mining”, 4th International Conference on Computational Intelligence in Data Mining ICCIDM, AISC Series, Springer, pp-435-448, 2017.
13. **A. Borah** & B. Nath, “FP-Tree and its Variants: Towards Solving the Pattern Mining Challenges”, *International Conference on Smart Systems, Innovations and Computing (SSIC)*, SIST Series, pp-535-543, Springer, 2017
14. **A. Borah** & B. Nath, “Mining patterns from data streams: an overview”, *International Conference on I-SMAC (IoT in social, mobile, analytics and cloud) (I-SMAC)*, pp- 371-376, IEEE, 2017.
15. **A. Borah** & S R Singh, “Impact of COVID-19 on Indian Politics: Analyzing Political Leaders Interactions and Sentiments on Twitter”, *Evolutionary Intelligence*, Springer. (Under Review)

Teaching and Research Experience

- Currently working as an Institute Post Doctoral Fellow in the department of Computer Science and Engineering, IIT Guwahati.
- Worked as an Assistant Professor in the department of Computer Science and Engineering, Assam Down Town University.

- Worked as an Assistant Professor in the department of Computer Science and Engineering, Assam Kaziranga University.
- Worked as an Assistant Professor in the department of Computer Science and Engineering, Jorhat Engineering College.

Workshop/ Training / Internship

- IOT Capacity Building Workshop conducted by CDAC Pune, 30-31 May, 2016.
- First Workshop on Computing: Theory and Applications, conducted by Indian Statistical Institute, North-East Center Tezpur, 14-18 March, 2016.
- Workshop on Regional Celebration of Women in Computing, East and North-East, organized by IIT-Guwahati in association with ACM-India, 2-3rd November, 2015.
- Undertaken a summer training on oracle database administration at **Indian Oil Corporation Limited (IOCL), Guwahati Refinery.**

Awards/Fellowship

- Awarded “**National Fellowship for Other Backward Classes (NFO-OBC)**” by UGC to pursue PhD for the duration 2015-2020.
- Awarded fellowship/prize money by **FlyTxt Data Analytics** for the research paper :- A.Borah & B.Nath, “Mining Rare Patterns using Hyper-Linked Data Structure”, as one of the best papers at 7th International Conference on Pattern Recognition and Machine Intelligence, ISI Kolkata.
- Reviewed papers for the following journals:
 1. **Information Sciences, Elsevier**
 2. **Expert Systems with Applications, Elsevier**
 3. **ISA Transactions, Elsevier**
 4. **Sustainable Cities and Society, Elsevier**
 5. **Soft Computing, Springer**
 6. **IEEE Internet Computing**
 7. **Journal of Experimental & Theoretical Artificial Intelligence, Taylor & Francis**
 8. **Informatics in Medicine Unlocked, Elsevier**
 9. **International Journal of E-Business Research, IGI Global**”

Personal Details

Date of Birth : 1ST March 1988
Sex : Female
Nationality : Indian
Religion : Hinduism
Language Known : English, Hindi and Assamese
Father's Name : Mr. Durga Prasad Borah

References

1. Dr. Bhabesh Nath (PhD Supervisor)
Associate Professor
Department of Computer Science and Engineering, Tezpur University
E-Mail: bnath@tezu.ernet.in
2. Dr. Arindam Karmakar
Assistant Professor
Department of Computer Science and Engineering, Tezpur University
E-Mail: arindam@tezu.ernet.in
3. Dr. Rupam Baruah
Professor, Head of the Department
Department of Computer Science and Engineering, Jorhat Engineering College
E-Mail: rupam.baruah.jec@gmail.com

Declaration

I do hereby declare that all the information furnished above is true to the best of my knowledge and belief.



Signature

(Anindita Borah)