

## **Ms. Malaya Dutta Borah**

### **Academic Qualifications:**

- PhD (Thesis Submitted) from Delhi Technological University (Formerly Delhi College of Engineering), India. Title of the Thesis: “Incremental Mining of frequent patterns from Educational Data”
- M.E (Computer Technology and Applications), 1<sup>st</sup> Class with distinction from Delhi College of Engineering, Delhi University, India
- B.Tech (Computer Science & Engineering) , 1<sup>st</sup> Class from North Eastern Regional Institute of Science and Technology, North Eastern Hill University, India

### **Work Experience:**

- 6 + Years (Teaching in Engineering Colleges)
- 2.7 Years ( Training, Rural Development at Community Information Centre, Dhakuakhana, under NIC Lakhimpur, Ministry of Communication and Information Technology, Govt. of India)

### **Courses Taught:**

Programming Fundamentals, Data Structure, Computer System Organization, Advanced Computer Architecture, Expert Systems, Multimedia, Electro technology-II, Data Warehouse and Data Mining.

### **Research Interest:**

- Data Mining, e-governance, Cloud Computing

### **Academic Achievements:**

**List of Publications (accepted/published): Google Scholar Citation Indices (till 05/07/2017): Citations (all): 179, h-index: 7, i-10 index: 5**

- **International Journals:**

[1] Rajni Jindal, **Malaya Dutta Borah**, “A novel approach for mining frequent patterns from incremental data”, *International Journal of Data Mining, Modelling and Management*, Vol. 8, No.3, Inderscience Publications, 2016. DOI: 10.1504/IJDM.2016.079071.

[2] Rajni Jindal, **Malaya Dutta Borah**, “Predictive Analytics in Higher Educational Context”, *IT Professional*, IEEE, Vol. 17, Issue 4, pp. 24-33, 2015 doi: 10.1109/MITP.2015.68.

[3] **Malaya Dutta Borah**, Rajni Jindal, “An approach for high utility incremental pattern mining”, *International Journal of Data Analysis Techniques and Strategies*, Inderscience publisher, 2016 [ In press] [Online]: <http://www.inderscience.com/info/ingeneral/forthcoming.php?jcode=ijdat>.

[4] Rajni Jindal, **Malaya Dutta Borah**, “A Survey on Educational Data Mining and Research Trends”, *International Journal of Database Management Systems (IJDMS)*, Vol.05, No.03, pp. 53 – 73, 2013, DOI: 10.5121/ijdms.

[5] **Malaya Dutta Borah**, Ganesh Ch. Deka, “An Approach to Biometric Authentication Using Hidden Markov Model”, *CiiT International Journal of Biometrics and Bioinformatics* Print: ISSN 0974 – 9675 & Online: ISSN 0974 – 956X DOI: BB042009001 Issue : April 2009.

- **International Conferences:**

[1] **Malaya Dutta Borah**, Rajni Jindal, “Constraint based Frequent Pattern Mining from Incremental Educational data: Educational Data Mining Approach”. Accepted for publication at the *2016 IEEE International Conference on Teaching and Learning in Education*, Universiti Tenaga Nasional, Malaysia, March 1-2, 2016.

[2] **Malaya Dutta Borah**, Rajni Jindal, “Constraint based filtering for Incremental Data Mining”, In *proceedings of the 7<sup>th</sup> IEEE International Conference on Computational Intelligence and Communication Networks*, Jabalpur, India, December 12-14, 2015. DOI: 10.1109/CICN.2015.163.

[3] Prashant Shrivastava, Edwin Basil Mathew, Ayush Yadav, Parijat P. Bezbaruah, **Malaya D. Borah**, “ Smoke Alarm-Analyzer and Site Evacuation System(S.A.A.N.S)” in *proc of IEEE 2014 Texax Instruments India Educators’ Conference*, April 4-5, Bangalore, pp. 144-150, DOI: 10.1109/TIIEC.2014.032.

[4] Rajni Jindal, **Malaya Dutta Borah**, “An approach to generate students' response on learning environment using Association Rule Mining”, in *proc of IEEE 2014 International Conference on Data Mining and Intelligent Computing (ICDMIC)*, Delhi, India, pp 1-5, September 5-6, 2014 doi: 10.1109/ICDMIC.2014.6954225.

[5] Daya Gupta, **Malaya Dutta Borah**, Gokul Pandey, “EDU-OPT”-A Decision Support Tool”, *Indian Society for Technical Education (ISTE) ,Delhi Section Convention, On “Technological Universities and Institutions in New Knowledge Age: Future Perspectives and Action Plan”*, Organized by Delhi Technological University, Book of Abstract pp 12, 5-6 September 2013

[6] Rajni Jindal, **Malaya Dutta Borah**, “Predicting Time Complexity and Accuracy of Branch Decision using Modified Heuristic Function”, in *Proc. of IEEE Int. Conf. on NUiCONE 2012*, India, 06-08 December 2012.

[7] Ganesh Ch. Deka, **Malaya Dutta Borah**, “Cost benefit analysis of cloud computing in education”, *IEEE -2012 International Conference on Computing, Communication and Applications*

(ICCCA), Print IEEE ISBN: 978-1-4673-0270-8, pp 1-6, Feb. 22-24, 2012, DOI: 10.1109/ICCCA.2012.6179142.

[8] Ganesh Ch. Deka ,**Malaya Dutta Borah** “A Study on Cloud OS”, *IEEE -2012 International Conference on Communication Systems and Network Technologies* pp.692-697, May11-13, 2012, Rajkot, Gujrat, India, DOI: 10.1109/CSNT.2012.154.

[9] Ganesh Ch. Deka ,**Malaya Dutta Borah** ,“Role of Cloud Computing in Education”, *IEEE: 2012 International Conference on Computing, Electronics and Electrical Technologies (ICCEET)*, Noorul Islam Centre for Higher Education-Kumaracoil-KK,Dist.Nagercoil,TamilNadu,India, pp. 832-836, 2012, DOI:10.1109/ ICCEET .2012 .6203884.

[10] Ganesh Ch. Deka ,**Malaya Dutta Borah** ,“Problems & Prospects of Indian Vocational Training & Education” , IEEE International Conference on Technology Enhanced Education (ICTEE), Organized by Amrita Vishwa Vidyapeetham, Kerala,India, pp. 1-7, January 3-5, 2012, DOI: 10.1109/ICTEE .2012 .6 20 8650.

[11] **Malaya Dutta Borah**, Rajni Jindal, Daya Gupta, Ganesh Ch. Deka “Application of knowledge based decision technique to Predict student’s enrollment decision”, IEEE -2011 International Conference on Recent Trends in Information Systems, Organised by Jadavpur University ,Kolkata ,India, ISBN no: 978-1-4577-0791-9, IEEE catalog Number:CFP1142P-CDR,December21-23,2011, pp. 180-184., DOI : 10.1109/ReTIS.2011.6146864.

[12] Ganesh Ch. Deka, **Malaya Dutta Borah**, “Problems & Prospects of e-Governance in India”, published in *IEEE - 2011 International Conference on World Congress on Information and Communication Technologies*, organised by Machine Intelligence Research Labs (MIR Labs) and University of Mumbai, December 11-14,2011, pp. 42 – 47, DOI:10.1109/WICT.2011. 6141215.

[13] Daya Gupta, Rajni Jindal, **Malaya Dutta Borah**, “A Knowledge Discovery based Decision Technique in Engineering Education Planning”, *International Conference on Data Mining, Macmillan Advanced Research Series “ Emerging Trends & Technologies in Data management”*, Organised by Institute of Management Technology Ghaziabad, pp 94-102, November 17-19, 2011,.

[14] Ganesh Ch. Deka, **Malaya Dutta Borah**, “ICT Its Role in e-Governance and Rural Development”. In: *Abraham A., Lloret Mauri J., Buford J.F., Suzuki J., Thampi S.M. (eds) Advances in Computing and Communications. ACC 2011. Communications in Computer and Information Science*, Vol 191. Springer, Berlin, Heidelberg, 2011, DOI: 10.1007/978-3-642-22714-1\_23.

[15] Ganesh Ch. Deka, **Malaya Dutta Borah**, “Role of E-Agriculture in Rural Development in Indian Context”, *International conference on Emerging Trends in Networks and Computer Communications*, Organized by The Institution Of Engineers Udaipur,India, IEEE Catalog Number: CFP1196N-CDR ,ISBN: 978-1-4577-0238-9, pp 320-323, , April 22-24, 2011, DOI: 10.1109/ETNCC.2011.6255913.

[16] **Malaya Dutta Borah**, Ganesh Ch. Deka, “Infrastructure & Agriculture : The tool for poverty eradication in NER” in *proc. of the International Conference on Resource Development and Environmental Change: Emerging Issues and Challenges*. Organized by : Department of Geography, AMU, Abstract pp. 83, Jan 27- 29, 2009,

[17] G C Deka, **Malaya Dutta Borah**, “E-waste Disposal : The challenges for environment” in *proc. of the International Conference on Resource Development and Environmental Change: Emerging Issues and Challenges*. Organized by : Department of Geography, AMU, Abstract pp 46, Jan 27th to 29th 2009.

• **National Conferences:**

[1] G. C. Deka, **Malaya Dutta Borah** , “Application of “Wireless Regional Area Network” in creating community Network” *3<sup>rd</sup> National Conference on Computing for nation Development INDIACom-2009*, Organized by: Bharati Vidyapeeth’s Institute of Computer Applications and management, Rohtak Road, New Delhi-63, ISBN 978=81-904526-6-3 ,ISSN 0973-7529 , pp 227, Feb. 26- 28, 2009.

[2] G. C. Deka, **Malaya Dutta Borah**, “ Application of ICT in bridging the Digital gap in NE states of India” *National conference on Architect ring Future IT Systems (NCAFIS 08)*, Organized by: School of Computer Science & Information Technology & School of Electronics, Devi Ahilya University, Indore, MP , pp 332-337, October 17-18 2008.

[3] G. C. Deka, **Malaya Dutta Borah**, “ICT: A new horizon for primary education in Rural India”, *National conference on Professional Education in Knowledge Economy*. Organised by: University School of Management Studies, Guru Gobin Singh Indraprastha University, New Delhi , ISBN 978-81-906531-7-6, pp 417-427, July 24<sup>th</sup>, 2008.

[4] Ganesh Ch. Deka, **Malaya Dutta Borah**, “Learning in the Age of Global Information and Communication Technology: e-learning in India , its prospect and future”, “*AICTE Sponsored National Seminar on Enterprise Information Systems*” Organized by: Apeejay Institute of Management Rama Mandi-Hoshiarpur Road Jalandhar-144007 , ISBN 978-81-8450-183-4 , pp 237-245 , May 24<sup>th</sup>, 2008.

**Faculty Development Program /Conferences/Workshops organized:**

- India International Conference on Information Processing 2016, 12-14 August 2016, Delhi Technological University, Delhi (as Organizing member)
- Two day workshop on Recent Advances in Software Engineering, 20-21 April 2012, Delhi Technological University, Delhi (as Organizing member)
- One day workshop on Recent Trends in Software Testing, 17 September 2010, Delhi Technological University, Delhi (as Organizing member)

## **Faculty Development Program/Seminars/Workshops/ Symposia etc. attended:**

- Malaya Dutta Borah. One week FDP on “Cryptography & Algebraic Coding Theory”, Department of Applied Science & Humanities and Department of Computer Science & Engineering, Inderprastha Engineering College, Ghaziabad, U.P-201010, 14-18 March, 2017
- Malaya Dutta Borah. TEQIP-II sponsored one week FDP on “Advances in Information Security”, Dept. of Computer Engineering, Delhi Technological University(DTU), Delhi-110042,18-22 January, 2016
- Malaya Dutta Borah. TEQIP-II sponsored FDP on “Nature Inspired Algorithms & Their Applications”, Dept. of Electrical Engineering, DTU , Delhi-110042,13-17 July, 2015
- Malaya Dutta Borah. Academic Worksop on “ Big data and Ontology”, Dept. of Electrical Engineering, IIT Delhi, Delhi-16, 19<sup>th</sup> September, 2015
- Malaya Dutta Borah. One day workshop on “Intellectual property Rights Awareness”, DeitY, Dept. of Electronics and Information Technology, Ministry of Communications and IT, Govt. of India, conducted by Indira Gandhi Delhi Technical University for Women,Delhi-110006, 26<sup>th</sup> September 2014
- Malaya Dutta Borah. One week FDP on “Recent Trends in Big Data and Cloud Computing”, Indira Gandhi Delhi Technical University for Women,Delhi-110006, 6-22 December 2013
- Malaya Dutta Borah. Indian Society for Technical Education (ISTE) ,Delhi Section Convention, On “Technological Universities and Institutions in New Knowledge Age: Future Perspectives and Action Plan, DTU, Delhi-110042, 5-6 September 2013
- Malaya Dutta Borah. Two day FDP on Data Mining and Semantic Web, Delhi Institute of Advanced Studies , Delhi-110085, 14-15 June 2013
- Malaya Dutta Borah. Two day workshop on Recent Advances in Software Engineering, DTU, Delhi-110042, 20-21 April 2012
- Malaya Dutta Borah. One day Seminar cum workshop on Mathematics and Computing, DTU, Delhi-110042, 22<sup>nd</sup> March 2012
- Malaya Dutta Borah. Two day FDP on Enterprise report delivery roadmap through Data Warehousing and Data Mining, Delhi Institute of Advanced Studies , Delhi-110085, 29-30 July 2011
- Malaya Dutta Borah. One day Seminar on CAN and CAN Open technology, DTU, Delhi-110042, 29 September 2010
- Malaya Dutta Borah. One day FDP Cloud Computing, Software Assurance and Testing, Bharitya Vidyapith College of Management, Delhi-110063 and TCS Delhi, 18 September 2010

- Malaya Dutta Borah. One day workshop on Recent Trends in Software Testing, DTU, Delhi-110042, 17 September 2010
- Malaya Dutta Borah. Two day National Program on Knowledge power in the world of learning, DTU, Delhi-110042, 25-26 August 2008
- Malaya Dutta Borah. Two day National Program on Motivation and Orientation Programme for faculty members of Engineering Institutions, DTU, Delhi-110042, 22-23 August 2008
- Malaya Dutta Borah. One week Training programme for CIC Operators, NIC Guwahati, Assam State Unit, Guwahati- 781005, 25 August – 05 September 2002
- Malaya Dutta Borah. One day workshop on Patent Awareness, NERIST, Arunachal Pradesh-791109, 17 October 2000

### **Honors & Awards Received:**

- Phase 1 Consolation Winner (as Faculty Mentor), Texas Instruments Innovation Challenge, India Analog Design Contest 2014, awarded on April 5, 2014 as part of the TI India Educators' Conference 2014 ([www.tiiec.in](http://www.tiiec.in))

### **Supervisory Support Provided/ Achievements:**

- No. of M.Tech Thesis guided: 01, B.Tech guided: 03 groups
- Faculty mentor : Technical events like ACM ICPC 2011, 2013

### **Extra-Curricular Activities:**

- NSS Group leader at B.Tech level, North Eastern Regional Institute of Science and Technology (NERIST), Arunachal Pradesh
- Various prize holder of sports/cultural activities at institute level (AEI, Assam and NERIST, Arunachal Pradesh )

### **Membership of Professional Societies:**

- Associate member of Computer Society of India (Membership No.: 00173524)
- Member of IEEE (Membership No: 94117178)