# HAIMONTI DUTTA

**Office**
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## EDUCATION

**Ph.D.** (2007) University of Maryland, Baltimore County. Computer Science and Electrical Engineering. Thesis: *Empowering Scientific Discovery by Distributed Data Mining on the Grid Infrastructure*. Advisor: Professor Hillol Kargupta.

**M.S.** (2002) Temple University. Computer and Information Science.

**B.C.S.E.** (1999) Jadavpur University. Computer Science and Engineering.

**RESEARCH INTERESTS** Data Mining and Machine Learning, Distributed Optimization, Distributed and Parallel Data Mining, Probabilistic Inference, Machine Learning in Crowdsourcing, Ubiquitous and Data Intensive Computing, Big Data, Computational Neuroscience.
**Applications:** Smart Environments (smart electrical grid, vehicles, buildings, wearable sensors), Digital Humanities, and Healthcare.

## EMPLOYMENT

**2023-Present:** Associate Professor (with Tenure), Department of Management Science and Systems, The State University of New York, Buffalo, NY.

**2014-2022:** Assistant Professor, Department of Management Science and Systems, The State University of New York, Buffalo, NY.

**2016-Present:** Affiliated Faculty Member, Institute for Artificial Intelligence and Data Science, The State University of New York, Buffalo, NY.

**2007-2014:** Associate Research Scientist, The Center for Computational Learning Systems, Columbia University, New York.

**2012-2016:** Affiliated Member, Health Analytics and Foundations of Data Science Center(s), Data Science Institute, Columbia University, New York.

**2011-2012:** Adjunct Assistant Professor, Department of Computer Science, Columbia University, New York.

**2013-2016:** Adjunct Assistant Professor. Department of Computer Science and Engineering. Indraprastha Institute of Information Technology (IIIT), Delhi.

**2003-2007:** Dissertation Fellow, Graduate and Teaching Assistants over several semesters, University of Maryland, Baltimore County, MD.

**2004:** Research Intern, Department of Media Delivery Architectures, International Business Machines (IBM), T. J. Watson Research Laboratories, Hawthorne, NY.

**2002-2004:** Graduate Research Assistant, Temple University, Philadelphia.

**1999-2000:** Software Consultant, iGate Global Solutions, Chennai.

## SCHOLARSHIPS, HONORS AND AWARDS

**2025:** e-Energy Test of Time Award, ACM SIGEnergy for the paper "NILMTK: An Open Source Toolkit for Non-intrusive Load Monitoring", International Conference on Future Energy Systems published in 2014.

**2024:** Winner of the State University of New York at Buffalo's Excellence in Research, Scholarship and Creativity Award for the paper "Leveraging Deep Learning for Accounting Fraud Detection".

**2024:** Winner of the Best Student Poster Award from the UB School of Management for the paper "Leveraging Deep Learning for Accounting Fraud Detection".

**2022:** Dean's Faculty Fellow, for a three year term starting academic year 2022-2023.

**2022:** Fellowship jointly offered by the American Institute of Indian Studies (AIIS) and National Endowment of Humanities (NEH) to build an art recommendation system for conservation of folk art and increasing sales in online marketplaces. Recognized as "Indologist in the humanities" by the NEH.

**2019:** Nominated for Best Cybersecurity Paper in the Science of Security (SoS) Paper Competition hosted by the National Security Agency for the Decision Support Systems (DSS) paper,"Intergroup Prejudice Detection: The Case of Microblogging under Terrorist Attacks".

**2014:** Winner of the Best Demo Paper Award in the ACM Conference on Embedded Systems for Energy-Efficient Buildings for the paper "NIMLTK v0.2: A non-intrusive load monitoring toolkit for large scale data sets".

**2008:** Nominated for the Best Paper Award in the International Conference for Machine Learning and Applications (ICMLA) for the paper,"Distributed Optimization Strategies for Mining on Peer-to-Peer Networks".

**2007:** Dissertation Fellowship Award, UMBC Graduate School.

**2007:** IBM Travel Grant awarded for participating at SIAM International Conference on Data Mining, Minneapolis, MN.

**2007:** Graduate Research Association (UMBC) Travel Grant.

**2006:** Travel Grant awarded by I.B.M Research for participating in Ph.D. Student Symposium at the International Conference on Service Oriented Computing (ICSOC), Chicago.

**2006:** Travel Grant awarded jointly by National Science Foundation (NSF) and Computing Research Association for Women (CRA-W) to participate in Workshop for Women in Machine Learning, San Diego, CA.

**2003:** Scholarship from BioInformatics Research Center (BRC), University of Maryland Baltimore County.

**1995:** Ranked within top 125 (amongst 10,000 students) in West Bengal Joint Entrance Examination.

**1993-1994:** Dr. B.C. Roy Scholarship for Outstanding Academic Achievement.

## PUBLICATIONS[1]

## I. REFEREED PUBLICATIONS

### A. Journal Articles

1. Cameron Ziegler, Sebastian Skardal, **Haimonti Dutta**, and Dane Taylor,"Balanced Hodge Laplacians Optimize Consensus Dynamics Over Simplical Complexes", *Chaos*, 32 (2), (2022).

2. **Haimonti Dutta** and Aayushee Gupta, "PNRank: Unsupervised Ranking of Person Name Entities from Noisy OCR Text", *Decision Support Systems*, 152, (2021).

3. **Haimonti Dutta**.,"A Consensus Algorithm for Linear Support Vector Machines", *Management Science*, 68 (5), (2021).

4. **Haimonti Dutta** and Ashwin Srinivasan.,"Consensus Based Modeling Using Distributed Feature Construction with ILP", *Machine Learning*, 107 (5), 825-858, (2018).

5. **Haimonti Dutta**, Hazel Kwon, and H. Raghav Rao.,"Intergroup Prejudice Detection: The Case of Microblogging under Terrorist Attacks", *Decision Support Systems*, 113, 11-21, (2018).

6. Xianshu Zhu, Tushar Mahule, **Haimonti Dutta**, Sugandha Arora, Hillol Kargupta, Kirk Borne,"Peer to Peer Distributed Text Classifier Learning in PADMINI", *Statistical Analysis and Data Mining Journal*, 5(5),446-462, (2012).

7. Cynthia Rudin, David Waltz, Roger N. Anderson, Albert Boulanger, Ansaf Salleb-Aouissi, Maggie Chow, **Haimonti Dutta**, Philip Gross, Bert Huang, Steve Ierome, Delphina Isaac, Arthur Kressner, Rebecca J. Passonneau, Axinia Radeva and Leon Wu, "Machine Learning for the New York City Power Grid", *IEEE Transactions on Pattern Analysis and Machine Intelligence (PAMI)*, 34(2), 328–345, (2011). [Citations: **231** (papers), 2 (patents), 5949 (full text views)].

8. Cynthia Rudin, Becky Passanneau, Axinia Radeva, **Haimonti Dutta**, Steve Ierome and Delfina Isaac, "A Process for Predicting Manhole Events in Manhattan", *Machine Learning*, 80(1),1-31, (2010). [Citation: **68**]

9. Hillol Kargupta, Byung Hoon Park, **Haimonti Dutta**, "Orthogonal Decision Trees", *IEEE Transactions on Knowledge and Data Engineering (TKDE)*, 18(7), 1028-1042, (2006). [Citations: **17** (papers); 418 (full text views)]

### A1. Manuscripts in Preparation

1. **Haimonti Dutta**, Saurabh Mahindre, Karan Ramchandani, Ratnaboli Bose, "Conservation, Recommendation, and Dynamic Pricing of Narrative Scroll Paintings for Economic Empowerment of Marginalized Artists", [Expected Submission: Summer 2025]

2. Anushka Tiwari, **Haimonti Dutta** and Shahrzad Khanizadeh, "Heterogeneous Sequel-Aware Graph Neural Networks for Sequential Learning", Pre-print: `https://arxiv.org/abs/2506.05625`

3. **Haimonti Dutta**, Shahrzad Khanizadeh, Justin Kwok, Patrick Zhang, "Predicting Long Length of Hospital Stays from Clinical Notes and Structured EHRs", [Expected Submission: Summer 2025]

4. **Haimonti Dutta**, Davoud Moradi, Noaman Rukdikar, "Consensus Online Support Vector Machines: A study of variance reduction and duality gap" , [Expected Submission: Dec 2025]

5. **Haimonti Dutta**, "A Consensus Algorithm for Scaling Quasi Newton Methods With SR1 Updates in Deep Learning", [Expected Submission: Summer 2026]

### B. Book Chapters

1. **Haimonti Dutta**, Alex Kamil, Manoj Pooleery, Simha Sethumadhavan and John Demme, "Distributed Storage of Large Scale Multidimensional Electroencephalogram Data using Hadoop and HBase", Grid and Cloud Database Management, 331-345, Springer, 2011 [Citations: **35**]

### C. Conference Proceedings and Workshop Papers

[1] All citations were recorded on 07/01/2024; h-index=18

1. Shahrzad Khanizadeh, Justin Kwok, and **Haimonti Dutta**, "Predicting Long Length of Hospital Stays from Clinical Notes and Structured EHRs", INFORMS Annual Meeting, (October, 2025).

2. Patrick Zhang and **Haimonti Dutta**, "Data Cleaning and Pre-processing of EHRs Collected During COVID Using R", SUNY Undergraduate Research Conference, Binghampton University (April, 2025).

3. **Haimonti Dutta**, "Data Driven Approaches to Estimating Hospital Length of Stay During COVID", International Business Analytics Conference, SUNY Fredonia, (May, 2025).

4. **Haimonti Dutta** and Anushka Tiwari, "Content-based Art Recommendation Using Multimodal Graph Neural Networks", International Conference on Knowledge Graphs (ICKG), pp. 67-74, (December, 2024).

5. **Haimonti Dutta**, "Using Patient Similarity Networks to Estimate Hospital Length of Stay", Decision Sciences Institute Annual Pedagogy Conference, (June, 2024).

6. **Haimonti Dutta**, "Designing Rube Goldberg-esque Machines for Training Deep Neural Networks", Decision Sciences Institute Annual Pedagogy Conference, (June, 2024).

7. Anushka Tiwari and **Haimonti Dutta** , "Content-Based Art Recommendation Using Multimodal Graph Neural Networks", The AI and Data Science Symposium at UB, (February, 2024).

8. Syed Razauddin, Debparna Bhattacharya, Victoria Gonzalez, Sai Teja Reddy, Chitral Patil and **Haimonti Dutta**, "Accounting Fraud Detection Using Text Features from 10K Reports: A Case Study", The AI and Data Science Symposium at UB, (February, 2024).

9. Victoria Gonzalez, Sai Teja Reddy, Chitral Patil and **Haimonti Dutta**, "Leveraging Deep Learning for Accounting Fraud Detection", International Business Analytics Conference, SUNY Fredonia, (December, 2023). **Winner of**
   - **Best Student Poster Award from the School of Management at UB**
   - **State University of New York at Buffalo's Excellence in Research, Scholarship and Creativity Award**

10. **Haimonti Dutta**, Saurabh Amarnath Mahindre and Nitin Nataraj, "Consensus-based Vertically Partitioned Multi-Layered Perceptrons for Edge Computing", International Conference on Discovery Science, (October, 2021).

11. **Haimonti Dutta** and Sean Sanders, "NetRank: Network based Ranking of Person Name Entities from Noisy OCR Text", Session on Text Analytics and Natural Language Processing, INFORMS Annual Meeting, (October, 2021).

12. Bao Huynh, **Haimonti Dutta** and Dane Taylor,"Impact of Community Structure on Consensus Machine Learning", Northeast Regional Conference on Complex Systems, (February, 2021).

13. Bao Huynh, **Haimonti Dutta** and Dane Taylor,"Applications of Stochastic Block Models on Consensus Based Learning", School Of Management Annual PhD Showcase, (April, 2019).

14. **Haimonti Dutta**,"The effect of stochastic approximations on a Gossip-bAseD sub-GradiEnT solver for Linear SVMs", International Florida Artificial Intelligence Research Society Conference, Sarasota, FL, (May, 2019).

15. **Haimonti Dutta**,"Games, Auctions and Consensus-based Machine Learning", International Florida Artificial Intelligence Research Society Conference, Sarasota, FL, (May, 2019).

16. **Haimonti Dutta**, Jayashree Chandrasekaran, Kaushik Panneerselvam, "Person Name Disambiguation Based on Profession", Workshop on Data Mining and Decision Analytics, INFORMS Annual Meeting, (November, 2018).

17. **Haimonti Dutta** and Ajinkya Thorve,"Ranking Clinical Trials Using Elastic Search", Text REtrieval Conference, Precision Medicine Track, Gaithersburg, MD, (November, 2017).

18. Aayushee Gupta and **Haimonti Dutta**,"Evaluation of Spell Correction on Noisy OCR Data.", Workshop on Data Mining and Analytics, INFORMS Annual Meeting, (October, 2015).

19. Megha Gupta, **Haimonti Dutta**, Brian Geiger,"Classification of Crowdsourced Text Correction", iKDD Conference on Data Sciences, 142-143, (March, 2015).

20. **Haimonti Dutta** and Ashwin Srinivasan,"Consensus-Based Modeling Using Distributed Feature Construction", International Conference on Inductive Logic Programming, (September, 2014).

21. Jack Kelly, Nipun Batra, Oliver Parson, **Haimonti Dutta**, William Knottenbelt, Alex Rogers, Amarjeet Singh and Mani Srivastava,"NILMTK v0.2: A Non-Intrusive Load Monitoring Toolkit for Large Scale Datasets", ACM Conference on Embedded Systems for Energy Efficient Buildings,182-183, (June, 2014). **Winner of Best Demo Paper**. [Citations: **45**]

22. Nipun Batra, Jack Kelly, Oliver Parson, **Haimonti Dutta**, William Knottenbelt, Alex Rogers, Amarjeet Singh and Mani Srivastava,"NILMTK: An Open Source Toolkit for Non-Intrusive Load Monitoring", International Conference on Future Energy Systems, 265-276, (June, 2014). [Citations: **417**]

23. Nipun Batra, **Haimonti Dutta** and Amarjeet Singh."INDiC: Improved Non-Intrusive Load Monitoring using Load Division and Calibration", International Conference on Machine Learning and Applications, 79-84, (December, 2013). [Citations: **36**]

24. **Haimonti Dutta** and William Chan."Using community structure detection to rank annotators when ground truth is subjective", Workshop on Human Computation for Science and Computational Sustainability, Conference on Neural Information Processing Systems, (December, 2012).

25. Rebecca Passonneau, Ashish Tomar, Somnath Sarkar, **Haimonti Dutta** and Axinia Radeva,"Multivariate Assessment of a Repair Program for a New York City Electrical Grid", International Conference on Machine Learning and Applications, Special Session on Machine Learning in Energy Applications, (December, 2012).

26. Boyi Xie, Rebecca J. Passonneau, **Haimonti Dutta**, Jing-Yew Miaw, Axinia Radeva, Ashish Tomar and Cynthia Rudin,"Progressive Clustering with Learned Seeds: An event categorization system for Power Grid",International Conference on Software Engineering and Knowledge Engineering, (July, 2012). [Citations: **4**]

27. **Haimonti Dutta**, "A Randomized Gossip-based Algorithm for Classification on Peer-to-Peer Networks", Workshop on Big Learning: Algorithms, Systems, and Tools for Learning at Scale, Conference on Neural Information Processing Systems, (December, 2011).

28. **Haimonti Dutta**, Huascar Fiorletta, Manoj Pooleery, Hatim Diab, Stanley German, David Waltz, "A Case-Study on Learning from Large-scale Intracranial EEG Data using Multi-core Machines and Clusters", Workshop on Large-scale Data Mining: Theory and Applications, SIGKDD, (August, 2011).

29. **Haimonti Dutta**, Rebecca J. Passonneau, Austin Lee, Axinia Radeva, Boyi Xie, David Waltz and Barbara Taranto, "Learning Parameters of the K-Means Algorithm from Subjective Human Annotation.", International Florida Artificial Intelligence Research Society Conference, Special Track on Data Mining, (May,2011). [Citations: **10**]

30. Leon Wu, Gail Kaiser, Cynthia Rudin, David Waltz, Roger Anderson, Albert Boulanger, Ansaf Salleb-Aouissi, **Haimonti Dutta**, and Manoj Pooleery, "Evaluating Machine Learning for Improving Power Grid Reliability",Machine Learning for Global Challenges, International Conference on Machine Learning, (June, 2011). [Citations: **17**]

31. Shen Wang and **Haimonti Dutta**,"PARABLE: A PArallel RAndom-partition Based HierarchicaL ClustEring Algorithm for the MapReduce Framework", Annual Machine Learning Symposium, New York Academy of Sciences, (October, 2011). [Citation: **17**]

32. **Haimonti Dutta**,"Density Estimation Based Ranking from Decision Trees", Annual Machine Learning Symposium, New York Academy of Science, (October,2011).

33. **Haimonti Dutta**, David Waltz, Karthik M Ramasamy, Phil Gross, Ansaf Salleb-Aouissi, Hatim Diab, Manoj Pooleery, Catherine A Schevon and Ronald Emerson,"Patient-Specific Seizure Detection From Intra-cranial EEG Using High Dimensional Clustering", International Conference on Machine Learning and Applications, (December, 2010).

34. Austin Lee, **Haimonti Dutta**, Rebecca J. Passonneau, David Waltz and Barbara Taranto,"Topic Identification from Historic Newspaper Articles of the New York Public Library: A Case Study", Annual Machine Learning Symposium, New York Academy of Sciences, (December, 2010).

35. Margret Una Kjartansdottir, **Haimonti Dutta**, Catherine A Schevon, Ansaf Salleb-Aouissi, David Waltz and Ronald Emerson,"Detection of High Frequency Oscillations Using Support Vector Machines: A Case Study", Women in Machine Learning, (December, 2010).

36. **Haimonti Dutta**, David Waltz, Ansaf Salleb-Aouissi, Catherine Schevon and Ronald Emerson,"Designing Patient-Specific Seizure Detectors From Multiple Frequency Bands of Intra-cranial EEG Using Support Vector Machines", Workshop on Data Mining for HealthCare Management, Pacific Asia Conference on Knowledge Discovery and Data Mining, (June, 2010).

37. Phil Gross, Ansaf Salleb-Aouissi, **Haimonti Dutta** and Albert Boulanger,"Ranking Electrical Feeders of the New York Power Grid", International Conference on Machine Learning and Applications,359 – 365, (December, 2009). [Citations: **20**]

38. **Haimonti Dutta**,"Measuring Diversity in Regression Ensembles", Indian International Conference on Artificial Intelligence, 2220- 2236, (December, 2009). [Citation: **28**]

39. Chase Hensel and **Haimonti Dutta**,"GERMS: a distributed sub-Gradient ERM Solver", Annual Machine Learning Symposium, New York Academy of Sciences, (November, 2009). [Citations: **15**]

40. **Haimonti Dutta**, David Waltz, Alessandro Moschitti, Daniele Pighin, Philip Gross, Claire Monteleoni, Ansaf Salleb-Aouissi, Albert Boulanger, Manoj Pooleery and Roger Anderson, "Estimating the Time Between Failures of Electrical Feeders in the New York Power Grid", Next Generation Data Mining Summit, (October, 2009).

41. **Haimonti Dutta**, Xianshu Zhu, Tushar Mahule, Hillol Kargupta, Kirk Borne, Codrina Lauth, Florian Holz, and Gerherd Heyer,"TagLearner: A P2P Classifier Learning System from Collaboratively Tagged Text Documents", International Conference on Data Mining, Workshop on Mining Multiple Information Sources, 495 – 500, (December, 2009).

42. Chase Hensel and **Haimonti Dutta**,"GADGET SVM: a Gossip-bAseD sub-GradiEnT SVM Solver", International Conference on Machine Learning (ICML), Numerical Mathematics in Machine Learning Workshop, (June, 2009).

43. **Haimonti Dutta**, David Waltz, Catherine A. Schevon, Karthik M Ramasamy, Phil Gross, Ansaf Salleb-Aouissi, Hatim Diab, Manoj Pooleery, Albert Boulanger and Ron Emerson, "Seizure Detection from Multiple Frequency Bands of Intra-cranial EEG using High Dimensional Clustering", International Workshop on Seizure Prediction, (June, 2009).

44. **Haimonti Dutta** and Ananda Matthur,"Distributed Optimization Strategies for Mining on Peer-to-Peer Networks", International Conference on Machine Learning and Applications, 350 - 355, (December, 2008). **Nominated for the Best Paper Award**

45. Haoyun Feng, **Haimonti Dutta** and Ansaf Salleb-Aouissi,"On Improving Probability Estimate Trees", Annual Workshop for Women in Machine Learning (WiML), Neural Information Processing Systems, (December,2008).

46. Phil Gross, Ansaf Salleb-Aouissi, **Haimonti Dutta** and Albert Boulanger, "Ranking Electrical Feeders of the New York Power Grid", Annual Machine Learning Symposium, New York Academy of Sciences, (October, 2008).

47. **Haimonti Dutta** and Hillol Kargupta, "Distributed Linear Programming and Resource Management for Data Mining in Distributed Environments", International Workshop on High Performance Data Mining (HPDM), International Conference on Data Mining, pages 543 – 552, (December, 2008). [Citations: **24**]

48. **Haimonti Dutta**, Cynthia Rudin, Becky Passonneau, Fred Seibel, Nandini Bhardwaj, Axinia Radeva, Zhi An Liu, Steve Ierome and Delfina Isaac, "Visualization of Manhole and Precursor-Type Events for the Manhattan Electrical Distribution System", Workshop on Geo-Visualization of Dynamics, Movement and Change, International Conference on Geographic Information Science, (May, 2008).

49. **Haimonti Dutta**, Chris Giannella, Kirk Borne, Hillol Kargupta, "Distributed Top-K Outlier Detection for Astronomy Catalogs using the DEMAC System", SIAM International Conference on Data Mining, (April, 2007).[Citations: **130**]

50. **Haimonti Dutta**, "Empowering Scientific Discovery by Distributed Data Mining on the Grid Infrastructure", IBM Symposium for PhD Students, International Conference on Service-Oriented Computing, (December, 2006).

51. Chris Giannella, **Haimonti Dutta**, Sourav Mukherjee and Hillol Kargupta,"Distributed Kernel Density Estimation", International Workshop on High Performance and Distributed Data Mining, SIAM Data Mining Conference,(April, 2006). [Citations: **14**]

52. Chris Giannella, **Haimonti Dutta**, Ran Wolff, Kirk Borne and Hillol Kargupta, "Distributed Data Mining in Astronomy Databases", Workshop on Mining Scientific and Engineering Data Sets, SIAM Data Mining Conference,(April, 2006).

53. **Haimonti Dutta**, Hillol Kargupta, and Anupam Joshi, "Orthogonal Decision Trees for Resource-Constrained Physiological Data Stream Monitoring using Mobile Devices", High Performance Computing Conference, 118–127, (December, 2005).

54. Hillol Kargupta and **Haimonti Dutta**, "Orthogonal Decision Trees", International Conference on Data Mining, 487–490, (November, 2004). [Citations: **49**]

55. Haimonti Dutta, Hillol Kargupta, Souptik Datta and Krishanamoorthy Siva Kumar, "Analysis of Privacy Preserving Random Perturbation Techniques: Further Explorations", Workshop on Privacy in the Electronic Society, ACM Conference on Computer and Communications Security, (October, 2003). [Citations: **24**]

56. Vasilis Megalooikonomou, **Haimonti Dutta**, Despina Kontos, "Fast and Effective Characterization of 3D Region Data", International Conference of Image Processing, 421–424, (September, 2002). [Citations: **17**]

## II. NON-REFEREED PUBLICATIONS

### A. Technical Reports

1. Sonali Kripal Hotwani and **Haimonti Dutta**, "An online tool to collect user preferences for a folk art recommendation system", MSS Experiential Learning Expo Poster and Technical Report (2025).

2. Patrick Zhang and **Haimonti Dutta**, "Pre-processing EHRs using R", SUNY Undergraduate Conference Report (2025)

3. **Haimonti Dutta**, Nitin Nataraj, Saurabh Mahindre, "Consensus Based Multi-Layer Perceptrons for Edge Computing", arXiv: 2102:05021, (2021).

4. Bao Huynh, **Haimonti Dutta**, Dane Taylor,"Impact of Community Structure on Consensus Machine Learning", arXiv: 2011.01334, (2020).

5. **Haimonti Dutta**, Aayushee Gupta, Srikanta Bedathur, and Lipika Dey. "A Machine Learning Framework to Quantitative Prosopography", arXiv:1801.10080, (2018).

6. **Haimonti Dutta** and Nitin Nataraj, "GADGET SVM: A Gossip-bAseD sub-GradiEnT solver for Linear SVMs", arXiv: 1812.02261, (2018).

7. **Haimonti Dutta** and Ashwin Srinivasan,"Consensus-Based Modelling using Distributed Feature Construction", arXiv:1409.3446, (2014).

8. Nipun Batra, Amarjeet Singh, Pushpendra Singh, **Haimonti Dutta**, Venkatesh Sarangan, Mani Srivastava, "Data Driven Energy Efficiency in Buildings", arXiv:1404.7227, (2014).

9. **Haimonti Dutta**, William Chan, Manoj Pooleery and Megha Gupta, "Leveraging "the Wisdom of the Crowds" for Efficient Tagging and Retrieval of Documents from the Historic Newspaper Archive of the New York Public Library", Final Report submitted to the National Endowment of the Humanities, (2013).

10. **Haimonti Dutta**, William Chan, Deepak Shankargouda, Manoj Pooleery, Axinia Radeva, Kyle Rego, Boyi Xie, Rebecca J. Passonneau, Austin Lee, Barbara Taranto
"Leveraging Subjective Human Annotation for Clustering Historic Newspaper Articles.", arXiv:1208.3530, (2012).

11. Shen Wang and **Haimonti Dutta**, "PARABLE: A PArallel RAndom-partition Based HierarchicaL ClustEring Algorithm for the MapReduce Framework", Technical Report, CCLS-11-04, (2011).

12. Phil Gross, Ansaf Salleb-Aouissi, **Haimonti Dutta** and Albert Boulanger, "Susceptibility Ranking of Electrical Feeders: A Case Study", Technical Report, CCLS-08-04, (2008).

13. Cynthia Rudin, Becky Passonneau, Axinia Radeva, **Haimonti Dutta**, Nandini Bhardwaj, Jawwad Sultan. "Columbia/Con Edison Project on Secondary System Events, Phase 2 Final Report", Center for Computational Learning Systems, Columbia University, (2007).

14. **Haimonti Dutta**,"Empowering Scientific Discovery by Distributed Data Mining on the Grid Infrastructure", A Proposal for Doctoral Research, submitted to the CSEE Department, UMBC, 2006.

15. Madhu Nayakkankuppam and **Haimonti Dutta**, "Maximum Likelihood Phylogenetic Tree Construction", Extended Abstract submitted to Graduate Research Conference, University of Maryland, Baltimore County, (2003).

16. Vasilis Megalooikonomou, Marc Sobel, **Haimonti Dutta**, Despina Kontos , "A statistical approach on effective dimensionality reduction for efficient classification of spatial regions of interest", (2002).

## PATENTS

1. Roger N. Anderson, Albert Boulanger, Cynthia Rudin, David Waltz, Ansaf Salleb-Aouissi, Maggie Chow, **Haimonti Dutta**, Phil Gross, Bert Huang, Steve Ierome, Delfina Isaac, Arthur Kressner, Rebecca J. Passonneau, Axinia Radeva, Leon L. Wu, Peter Hofmann, Frank Dougherty. "Machine Learning for Power Grid", Patent Number: 8,751,421, Awarded: June, 2014. [Citations: **57**]

## GRANTS AND SUPPORT

### A1. External Funding Agencies

**2022-2023:** Fellow of the National Endowment of Humanities, "Digitization, Transcription and Art Recommendation from Painted Narrative Scrolls of Bengal", Joint Fellowship from the National Endowment of Humanities and the American institute of India Studies, Award Amount: $45,000.

**2017-2018:** Senior Personnel,"Acquisition of High Performance Computing Infrastructure to Support Computational and Data-Enabled Science and Engineering", National Science Foundation, Grant Number 1724891.

**2015-2016:** Senior Personnel,"North East Big Data Innovation Hub: Health Spoke", National Science Foundation, Grant Number 1550284.

**2009-2013:** Principal Investigator,"EEGMine: A Distributed Framework for Learning on EEG Data obtained from Epilepsy Patients", National Science Foundation, Grant Number IIS-0916186, Award Amount: $440,000.

**2013-2014:** Co-Principal Investigator (with Dr. Jeffrey Durachta and Robert Millstein),"Using Machine Learning to Understand the Scaling Behavior of the GFDL FMS High-Resolution Atmosphere Model on the Argonne BG/Q Platform", Argonne National Laboratory, Award Amount: $43,000.

**2013-2014:** Co-Principal Investigator (with Dr. Amarjeet Singh),"Development of distributed algorithms for incremental sensing and communication", $EMC^2$, Award Amount: $20,000.

**2008-2010:** Co-Principal Investigator (with Dr. David Waltz, Dr. Catherine Schevon, Dr. Ron Emerson, Dr. Gail Kaiser, Dr. Ansaf Salleb-Aouissi),"An *early warning* device to allow epilepsy patients to lead a more normal life", Research Initiatives in Science and Engineering (RISE), Columbia University, New York, Award Amount: $170,000.

**2009-2012:** Co-Principal Investigator (with Dr. David Waltz and Dr. Catherine Schevon),"Intracranial EEG Acquisition System with Online Fast Ripple Detection", Epilepsy Research Foundation, Award Amount: $200,000.

**2010:** Principal Investigator,"A Distributed Framework for Learning on EEG data Obtained from Epilepsy Patients", Amazon Web Services (AWS) in Education Research Grant, Award Amount: $3000 in infrastructure for use of the Amazon Elastic Compute Cloud (EC2), Amazon Simple Storage Service (S3), AWS Data Transfer and Amazon Virtual Private Cloud.

**2010-2013:** Principal Investigator,"Leveraging "The Wisdom of the Crowds" for Efficient Tagging and Retrieval of documents from the Historic Newspaper Archive of the New York Public Library", National Endowment of Humanities, Digital Humanities Start-Up Grant, Award Amount: $49,452.

**2011-2012:** Co-Principal Investigator (with Dr. Roger Anderson,Dr. Doug Riecken,Dr. Ansaf Salleb-Aouissi),"Adaptive Stochastic Controller Load and Source Optimization For the Secure Interoperable Smart Grid Demonstration",Department of Energy, Award Amount: $3 million.

**2008-2009:** Co-Principal Investigator (with Dr. Roger Anderson,Dr. David Waltz, Dr. Alessandro Moschitti),"Conversion from Susceptibility Ranking to Mean-Time- Between-Failure Statistical Estimation for Feeders, Sections, and Joints", Consolidated Edison Company of New York, Award Amount: $461,322.

**2008:** Co-Principal Investigator (with Dr. Roger Anderson,Dr. Cynthia Rudin, Dr. Rebecca Passonneau.)"Manhole Events and Secondary System Machine Learning Project - Phase 3 and 4", Consolidated Edison Company of New York, Award Amount: $440,00 and $413,947.

**2007-2011:** Senior Personnel (with Dr. Hillol Kargupta),"Distributed and Peer-to-Peer Data Mining for Scalable Analysis of Data from Virtual Observatories", NASA, Research Opportunities in Earth and Space Science (ROSES), Award Amount: $722,541.

### A2. University Grants

**2021-2022:** Principal Investigator,"Multimodal Deep Learning", School of Management, Summer Research Award, Award Amount: $15,000.

**2019-2021:** Principal Investigator,"Digitization, Transcription and Art Recommendation From Painted Narrative Scrolls of Bengal", Nila T. Gnamm Junior Faculty Research Award, Department of Geography, The State University of New York at Buffalo, Award Amount: $1000.

**2018-2019:** Principal Investigator,"Detection of Prejudice from Social Media Streams", School of Management, Summer Research Award, Award Amount: $13,300.

**2017-2018:** Principal Investigator,"Consensus-based Machine Learning", School of Management, Summer Research Award, Award Amount: $11,500.

**2016:** Principal Investigator,"Hadoop on Lake Effect Cloud", Center for Computational Research (CCR), The State University of New York, Award Amount: Free subscription to Lake Effect Cloud for 120 students.

## TUTORIALS

1. **2020:** "Optimization Methods for Machine Learning", Asian Conference on Machine Learning, Virtual Presentation.
2. **2018:** "Optimization Methods for Machine Learning", 3-day lecture series for Computer Science students, BITS Pilani, Goa.
3. **2017:** "Optimization Methods for Machine Learning", 2-hr.Workshop at Computational and Data-Enabled Science and Engineering Days, UB.

## PRESENTATIONS, WORKSHOPS AND INVITED TALKS

1. "AI for Business Analytics: Predicting Hospital Length of Stay", AI Legislative Briefing organized by Office of Vice President of Research, SUNY Buffalo, January 2025.

1. "Content-based Art Recommendation Using Multimodal Graph Neural Networks", Institute of Artificial Intelligence and Data Science Tech Exchange Series, November 2024.

1. "Using Patient Similarity Networks to Estimate Hospital Length of Stay", Decision Sciences Institute Annual Pedagogy Conference, June 2024.
2. "Designing Rube Goldberg-esque Machines for Training Deep Neural Networks", Decision Sciences Institute Annual Pedagogy Conference, June 2024.
3. "Using African American Literature To Teach Analytics Courses in Business Schools", SUNY Business Deans Diversity, Equity and Inclusion Conference, Virtual Presentation, April, 2021.
4. "Games, Auctions and Consensus Based Learning", FLorida Artificial Intelligence Research Society (FLAIRS), Sarasota, FL, May, 2019.
5. "The effect of stochastic approximations on a Gossip bAseD subGradiEnt solver for Linear SVMs", FLorida Artificial Intelligence Research Society (FLAIRS), Sarasota, FL, May, 2019.
6. "Person Name Disambiguation Based on Profession",Data Mining and Decision Analytics Workshop, INFORMS Annual Meeting, Phoenix, AZ,November, 2018 (Also presented at "Statistical Data Analytics" session of the annual meeting.)
7. "Ranking Clinical Trials using Elasticsearch", Text REtrieval Conference (TREC), Precision Medicine Track, Gaithersburg, MD,November, 2017.
8. "PARABLE: A Parallel Random-Partition Based HierarchicaL ClustEring Algorithm for the MapReduce Framework", INFORMS Annual Meeting, Nashville, TN, November, 2016.
9. "Consensus-based Modeling Using Distributed Feature Construction by ILP", INFORMS Annual Meeting, Nashville, TN,November, 2016.
10. "Evaluation of Spell Correction on Noisy OCR Data.", INFORMS Workshop on Data Mining and Analytics, INFORMS Annual Meeting, Philadelphia,October 2015.
11. "Tackling the data deluge in epilepsy", Management Science and Systems Department, School of Management, State University of New York at Buffalo, September 2013.
12. "Tackling the data deluge in epilepsy", Siemens Corporate Research, Princeton, NJ, August, 2013.

13. "Large-scale Support Vector Machines: Current Research Trends and Future Directions", Big Data School, Pacific Asia Conference on Knowledge Discovery and Data Mining (PAKDD), Sydney, Australia, April, 2013.

14. "GADGET SVM: a Gossip-bAseD sub-GradiEnT SVM Solver", Tata Consultancy Services, Research Lab, New Delhi, April 2013.

15. "Leveraging Collective Annotation for Machine Learning on the NYPL Historic Newspaper Archive", Newspaper Interest Group, Annual Conference of the American Library Association, Anaheim, CA 2012.

16. "Large-scale machine learning on intra-cranial electroencephalogram (iEEG) from epilepsy patients", Department of Information Systems, Oakland University, Detroit, April 2012.

17. "Leveraging Collective Annotation for Machine Learning on the NYPL Historic Newspaper Archive", co-hosted by the Department of Library Science and Computer Science and Engineering, University of North Texas, Denton TX, April 2012.

18. "Supervised Learning on Peer-to-Peer Networks", Invited Talk, Accenture Technology Labs, Reston VA, 2012.

19. "Large-scale machine learning on intra-cranial electroencephalogram (iEEG) from epilepsy patients", Department of Information Systems, NJIT, March 2012.

20. "Leveraging Collective Annotation for Machine Learning on the NYPL Historic Newspaper Archive", IIIT Delhi, March, 2012.

21. "A Case-Study on Learning from Large-scale Intracranial EEG Data using Multi-core Machines and Clusters", The Third Workshop on Large-scale Data Mining: Theory and Applications, SIGKDD, San Diego, August, 2011.

22. "Learning Parameters of the K-Means Algorithm from Subjective Human Annotation.", The 24th International FLAIRS Conference, Palm Beach, FL. May, 2011.

23. "Modeling Failures of Electrical Components and Power Flow in Smart Power Grids: Progress and Challenges", Santa Fe Institute, NM, Workshop on Decentralized Control in Systems of Strategic Actors, Invited Talk, August 2010.

24. "Algorithms for Distributed Supervised and Unsupervised Learning", NY Machine Learning Group, AOL Headquarters, NY, April, 2010.

25. "Data Mining on Intracranial EEG obtained from Epilepsy Patients", Trenton Computer Festival (TCF) at the College of New Jersey, 2010.

26. "Measuring Diversity of Regression Ensembles", 4th Indian International Conference on Artificial Intelligence (IICAI), Tumkur, India, December, 2009.

27. "Distributed Data Mining on Intracranial EEG obtained from Epilepsy Patients", IBM Research, Bangalore, India, Invited Talk, December, 2009.

28. "Machine Learning: An Introduction", Trenton Computer Festival (TCF) at the College of New Jersey, 2009.

29. "Distributed Linear Programming and Resource Management for Data Mining in Distributed Environments", 10th International Workshop on High Performance Data Mining (HPDM) held in conjunction with the International Conference on Data Mining (ICDM), Pisa Italy.

30. "Machine Learning Susceptibility Ranking System", Special International Utility Working Group(IUWG) Workshop on Computer-Aided Lean Management for the Energy Industry, April, 2008.

28. "Distributed Optimization Strategies for Mining on Peer-to-Peer Networks", ICMLA, San Diego, December 2008.

31. "Visualization of Manhole and Precursor-Type Events for the Manhattan Electrical Distribution System", Workshop on Geo-Visualization of Dynamics, Movement and Change, Girona, Spain, May 2008.

32. "Distributed Top-K Outlier Detection from Astronomy Catalogs using the DEMAC System", SIAM International Conference on Data Mining, Minneapolis, MN USA, April 2007.

33. Talk on my Ph.D. thesis, I.B.M. Ph.D. Student Symposium at International Conference on Service Oriented Computing (ICSOC), Chicago, December, 2006.

34. "Distributed Data Mining on Astronomy Catalogs", Poster Presentation at the Workshop for Women in Machine Learning (WiML), San Diego, October 2006.

35. "Empowering Scientific Discovery by Distributed Data Mining on the Grid Infrastructure", Ph.D. Proposal Defense Presentation, Department of Computer Science and Electrical Engineering, UMBC, August 2006.

36. "A Routing Algorithm for Content Based Publish Subscribe Data Streams", I.B.M, T.J.Watson Research Laboratory, August 2004.

37. "Classification of 3D Region Data", The Center of Information Science and Technology, Temple University, October 2001.

38. "Shape Representation and Matching in Medical Tumor Databases (using mathematical morphology)", CIS Department, Temple University, April 2001.

39. "Spatial Data Mining", CIS Department, Temple University, April 2001.

40. "A Tutorial on Bayesian Networks", Temple University, Nov 2000.

41. "Maintenance of Software", Jadavpur University, Kolkata, India, April 1998.

## RESEARCH SUPERVISION

1. **Doctoral**

   **2025:** Shahrzad Khanizadeh, Department of Management Science and Systems, UB (Role: First year paper advisor)

   **2025:** Davoud Moradi, Department of Computer Science, UB (Role: Research Advisor in a project)

   **2023-2025:** Anushka Tiwari, Institute for Artificial Intelligence and Data Science, UB (Role: Dissertation Chair)

   **2024:** Victoria Gonzalez, Department of Management Science and Systems, UB (Role: Research Advisor in a project)

   **2022-23:** Cameron Ziegler, Mark Sullivan – Maths Department, UB (Role: Research Advisor in a project)

   **2022-23:** Sean Sanders, Department of Computer Science, UB (Role: Research Advisor in a project)

   **2022:** Bao Huynh, Maths Department, UB. First Placement: US Navy. (Role: Dissertation Committee Member)

   **2018:** Srikanth Parameswaran, Management Science and Systems, UB. First Placement: Assistant Professor, SUNY Binghamton (Carnegie R1) (Role: Dissertation Committee Member).

   **2018:** Suchismit Mahapatra, Department of Computer Science, UB, First Placement: Criteo Research (Role: Dissertation Committee Member).

   **2017:** Chris Bang, Management Science and Systems, UB, First Placement: Assistant Professor, Auburn University (Carnegie R2) (Role: Dissertation Committee Member).

   **2010-2013:** Shen Wang, The Center for Computational Learning Systems, Columbia University. (Role: Advisor).

2. **Junior Colleagues**

   **2025:** Saurabh Mahindre, Data Scientist, Oracle, Austin, TX.

   **2023:** Naman Pundir, Research Associate, Foundry Digital, Williamsville.

**2011-2012:** Kevin Mc Inerny, Staff Associate, The Center for Computational Learning Systems, Columbia University.

**2012:** Ashish Tomar, Staff Associate, The Center for Computational Learning Systems, Columbia University.

**2007-2014:** Axinia Radeva, Staff Associate, The Center for Computational Learning Systems, Columbia University.

**2011-2012:** Boyi Xie, Ph.D. student, Columbia University.

**2012:** Somnath Sarkar, Department of Industrial Engineering and Operations Research, Columbia University.

3. **Master's Theses Supervised**

**2014:** Aayushee Gupta, "Finding Influential People from a Historical News Archive", M.Tech, Data Engineering, IIIT Delhi (Role: Advisor, Dissertation Committee Members: Dr Srikanta Bedathur, Lipika Dey).

**2014:** Swati Agrawal, "Detecting Copyright Violation on YouTube Videos using YouTube MetaData". M.Tech, Data Engineering, IIIT Delhi (Role: Dissertation Committee Member).

**2014:** Megha Gupta, "Evaluation of OCR Text Correction By Crowdsourcing on a Historic Newspaper Archive", M. Tech, Data Engineering, IIIT Delhi (Role: Advisor).

4. **Master's Students**

**2025:** Noaman Rukdikar – M. S. in Management Information Systems, University at Buffalo.

**2025:** Karan Ramchandani – M.S. in Artificial Intelligence, University at Buffalo.

**2024-25:** Srilakshmi Anjanadevi, Sonali Kripal Hotwani – M. S. in Management Information Systems, University at Buffalo.

**2024:** Ashesh Shresta – M.S. in Industrial Engg., University at Buffalo

**2024:** Andrew Ricupito – M.S. in Mathematics, University at Buffalo

**2024:** Priya Patil, Chitral Patil, Debparna Bhattacharya, Syed Rezauddin, Tajammul Syed – M.S. in Data Science, University at Buffalo.

**2023:** Jishnu Basak, Abhishu Rajbhandari – M. S. in Econometrics and Quantitative Economics, University at Buffalo.

**2023:** Saishma Poola, Lokesh Jain, Sejal Deepak Kankriya, Chitral Patil, Sai Teja Reddy Pathika, Anchal Sohjatiya, Nisarg Negi, Saurabh Mahindre – M. S. in Data Science, University at Buffalo.

**2020:** Sushma Alluri, M. S. in Data Analytics, University of Illinois, Springfield.

**2020-2021:** Marko Lazin, M.S. in Transportation and Systems Engineering, UB.

**2020:** Vishal Venkatesh, M. S. in Interdisciplinary Data Science, Duke University.

**2017-2020:** Sujoy Dutta, Neha Lalaso Jagtap, Jayashree Chandrasekaran, Nitin Nataraj, Kaushik Panneerselvam, Mihir Chauhan – M. S. in Computer Science, UB.

**2017-2020:** Keval Chheda, Sushma Sharma, Akshat Shehgal, Samridhi Sharma – M.S. in MIS, UB.

**2013-2021:** Aayushee Gupta, Data Engineering, IIIT-Bangalore.

**2013-2014:** Lovey Agrawal, Data Engineering, IIIT-Delhi.

**2008-2014:** Deepak Nayak(2012-2013), Suraj Kesari (2012), William Chan(2010-2013), Deepak Shakargouda(2011-2012), Nandini Bhardwaj(2007-2008), Ananda Mathur(2007-2008), Haoyun Feng(2008), Devendra Laukar(2008), Cheng Cheng(2008), Karthik Marudachallam Ramasamy(2008-2011), Huascar Fiorletta(2009-2010), Vinodkumar Prabhakaran(2008-2009, Co-supervised with Dr. Rebecca Passonneau), Abhinav Saini(2008), Mariya Riskova(2008), Austin Lee(2010-2012), Taylor Brown(2009), Yash Satsangi(2011-2012) – M. S. in Computer Science, Columbia University.

**2010-2012:** Connie Lee(2010), Pascal Notin(2011), John Zhang(2011-2012),Raghuram Nagireddy(2012-2013) – M.S. in Industrial Engineering and Operations Research, Columbia University.

**2011-2012:** Tushar Mahule(2011-2012), Xianshu Zhu(2011-2012) – M.S. in Computer Science, University of Maryland, Baltimore County, co-advised with Dr. Hillol Kargupta.

**2013:** Amit Sengupta, M.S. in Biostatistics, Columbia University.

**2011-2013:** Vashist Avadhanula, Dual Degree (B.Tech and M.Tech), Department of Electrical Engineering, IIT-Bombay.

**2012-2013:** Priyanshu Jain, Dual Degree (B. Tech and M. Tech), Department of Electrical Engineering, IIT-Delhi.

5. **Undergraduate Students**

**2024-25:** Patrick Zhang, Department of Biostatistics, SUNY Buffalo.

**2024-25:** Justin Kwok, Department of Computer Science and Department of Economics, SUNY Buffalo.

**2022-2023:** Abhijit Anil, Global Programs at SUNY Buffalo.

**2022-2023:** Gvido Jaunzems, Riga Business School, Latvia (Global Programs at SUNY Buffalo).

**2008-2010:** Chase Hensel(2008-2010), Stanley German(2010), Margret Una Kjartansdottir, Stephen Pratt, Kyle Rego – Department of Computer Science, Columbia University, NY.

**2010-2011:** Alex Kamil, School of General Studies, Columbia University.

6. **High School Students**

**2024:** Bogdan Kuzmanov, Pingry School in Basking Ridge, New Jersey.

**2024:** Mason Hollis, Lakshanya Kakku, Williamsville East High School, Buffalo.

**2023-2024:** Ananth Narayan, Williamsville East High School, Summer Research at SUNY Buffalo. Presented paper entitled "BioHoPPR: Generating Biographies by Implementing a Historical Paper Persona Ranking Method" at IEEE Integrated Stem Education Conference at Princeton University, NJ.

**2010:** Shoshana Gottesman, Touro College, Funded by NSF DREU Program.

**2010:** Rivka Levitan, Brooklyn College, CUNY, Funded by NSF DREU Program.

**2013:** Ashutosh Nanda, Senior Montogomery County High School.

## TEACHING EXPERIENCE

1. **2014-2024:** Courses taught at the State University of New York, Buffalo.

   A. Graduate Courses

   **2024-25:** MGS 670: Healthcare Analytics (Online)

   **2019-2025:** MGS 662: Optimization Methods for Machine Learning, (In-person and Online due to COVID)

   **2015-2018:** MGS 618: Machine Learning for IT Managers

   **2015-2016:** MGS 618: Big Data Information Management

   **2014-2021, 2023-2024:** MGS 655: Distributed Computing and Big Data Technologies (In-person and Online due to COVID)

   B. Research Seminars

   **2025:** MGS 785: Reinforcement Learning, Doctoral Seminar [Ph.D. Students from Management Information Systems].

   **2022:** MGS 785: Game Theory, Mechanism Design and Machine Learning [Ph.D. Students from Management Information Systems, Operations Research and Computer Science were enrolled]

   **2018-2021, 2023:** MGS 798: MSS Workshop for 1st-2nd year Ph.D. students.

   **2017-2018:** MGS 647: Supervised Research [Students from Computer Science, Data Science and Management Information Systems were enrolled.]

   **2017-2018:** MIS Practicum Supervision

   C. Undergraduate Courses

   **2021-2022:** MGS 406: Big Data Technologies, Online due to COVID

   **2021:** MGS 408: Intro to Machine Learning for Business, Online due to COVID

   **2019:** MGS 420: Big Data and Large Scale Computing for Business

2. **2013:** Courses taught at IIIT-Delhi, Department of Computer Science.

   A. Graduate Courses

   CSE 608: Distributed Data Mining

3. **2011-2012:** Courses taught at Columbia University, Department of Computer Science

   A. Graduate Courses

   COMS 6998: An Introduction to Distributed Data Mining

4. **2006:** Courses taught at University of Maryland Baltimore County, Department of Computer Science and Electrical Engineering.

   A. Undergraduate Courses

   CMSC 441: Algorithm Design and Analysis

   CMSC 461: Database Management Systems

5. **2001-2002:** Supervised undergraduate students in Math and Statistics, Math and Science Resource Center, Temple University.

6. **1997-1999:** Taught Mathematics, Statistics, Physics, Chemistry and Biology to High School students.

**Colloquium**

1. Machine Learning Brown Bag Lunch, The Center for Computational Learning Systems, Columbia University. (2011-2012, 2007-2008).

## PROFESSIONAL SERVICE

### Program Committees

1. AAAI Conference on Artificial Intelligence, (AAAI 2019,2020, 2021,2023,2024)
2. Neural Information Processing Systems (NeurIPS 2012-2020, 2022, 2023, 2024, 2025).
3. International Conference on Machine Learning (ICML 2012, 2013, 2014, 2017, 2018, 2019, 2020, 2024).
4. International Conference on Machine Learning, Image Processing, Network Security and Data Science (MIND 2020).
5. AI & Statistics (AISTATS 2014, 2025).
6. IEEE Big Data 2013.
7. International Conference on Learning Representations, (2017, 2020).
8. International Conference on Discovery Science, (DS 2024, 2025).
9. International Conference on Advanced Computing, Networking and Informatics, 2018.
10. Second International Conference on Big Data Analytics (BDA-2013).
11. CIKM Workshop on Data Management and Analytics for Healthcare (DARE, 2013).
12. Euro-Par, Topic PC Member, (2005, 2012).
13. International Conference on Machine Learning and Applications (ICMLA 2010, 2011).
14. International Conference on Advances in Social Networks Analysis and Mining (ASONAM, 2010, 2011, 2012, 2013).
15. International Conference on Data Mining (ICDM 2006, 2009, 2010, 2011, 2012, 2013).
16. SIAM International Conference on Data Mining (SDM 2005, 2006, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016).
17. ACM Conference on Knowledge Discovery and Data Mining, (ACM SIGKDD 2007, 2008, 2009, 2010, 2011).
18. Pacific-Asia Knowledge Discovery and Data Mining, (PAKDD 2008, 2009, 2011, 2012, 2013).
19. ACM Fifteenth Conference on Information and Knowledge Management, (CIKM 2006).
20. Indian International Conference on Artificial Intelligence, (IICAI 2011).
21. European Conference on Machine Learning and Practice of Knowledge Discovery in Databases (ECML-PKDD 2008).
22. Annual Workshop for Women in Machine Learning (WiML 2007)
23. Grace Hopper Celebration of Women and Computing, Travel Scholarships (2008, 2009, 2010).

### Editorships

1. Coordinating Editor, Information Systems Frontiers (2015).

### Committees and Board Membership

1. American Institute of Indian Studies, Digital India Learning (DIL) Committee (2024-25)

**Reviewer**

**Research Proposals**

1. Panelist for Austrian Science Fund, 2021.
2. Panelist for NSF – GRFP Program, 2025; III Program, 2013; CDI Program, 2010; IIS Program, 2008.
3. Panelist for Portuguese Foundation for Science and Technology (FCT), 2012.
4. Panelist for The Council for Physical Sciences of the Netherlands Organization for Scientific Research (NWO), 2005.

**Books**

1. Monographs, Routledge, (2021).

**Journals**

1. Communications of the ACM, (2020, 2021).
2. Decision Support Systems, (2018, 2019, 2020, 2021, 2024).
3. IEEE Tran. on Computers, (2018).
4. IEEE Tran. on Network Science and Engineering, (2022).
5. IEEE Tran. on Smart Grid, (2018).
6. INFORMS, Journal of Computing (2014, 2015, 2021).
7. IEEE Transactions on Big Data (2015, 2016, 2019).
8. IEEE Transactions on Systems, Man and Cybernetics (2010, 2008).
9. Data Mining and Knowledge Discovery (DMKD) Journal (2009, 2012, 2013).
10. WIRES Data Mining and Knowledge Discovery (2009).
11. IEEE Transactions on Knowledge and Data Engineering (TKDE) (2007, 2008, 2011, 2016).
12. Information Fusion Journal
13. Frontiers of Neuroscience (2025)
14. SpringerNature, Journal of Supercomputing (2024)
15. Nature Scientific Reports (2024-25)

**University Service**

1. **2025-2026:** Budget Committee, UB.
2. **2023-2025:** Research and Creative Activities Committee, UB.
3. **2018-2025:** Ph.D. Program Faculty Advisor, MSS Department, UB.
4. **2018-2021:** Member of Ethics Committee, MSS Department, UB.
5. **2013-2014:** Member of Master's thesis awards committee, Department of Computer Science, IIIT-Delhi.

## MEDIA IMPRESSIONS

1. Campus Reform: https://www.campusreform.org/?ID=11423
2. UBNow: http://www.buffalo.edu/ubnow/research/news.host.html/content/shared/university/news/ub-reporter-articles/stories/2018/10/dutta-prejudice-social-media.detail.html
3. News and Highlights, School of Management, UB: https://mgt.buffalo.edu/about/news/releases.host.html/content/shared/mgt/news/organizations-can-learn-more-internet-connected-devices.detail.html
4. Buffalo Business: https://mgt.buffalo.edu/about/buffalo-business/2020spring/features/declaring-independence.html
5. Niagara Frontier Publications: https://www.wnypapers.com/news/article/current/2018/10/09/134407/study-system-could-curb-social-media-harassment-abuse
6. News and Highlights, School of Management, UB: https://mgt.buffalo.edu/about/news.host.html/content/shared/mgt/news/curbing-social-media-harassment-and-abuse.detail.html
7. Buffalo Business: https://management.buffalo.edu/about/buffalo-business/2019spring/departments/insights.html
8. Assembly eMagazine: https://www.assemblymag.com/articles/96570-the-big-data-dilemma?
9. UB International: http://www.buffalo.edu/content/dam/www/internationaleducation/files/ubintlspring2019.pdf
10. UBNow: http://www.buffalo.edu/ubnow/stories/2021/10/algorithm-historical-documents.html
11. Tech Xplore: https://techxplore.com/news/2021-10-algorithm-historic-documents-noteworthy-people.html
12. Before It's News: https://beforeitsnews.com/science-and-technology/2021/10/new-algorithm-searches-historic-documents-to-discover-noteworthy-people-3000332.html
13. UB International: http://www.buffalo.edu/content/www/internationaleducation/news, Fall 2021.

## OTHER PUBLICATIONS

1. **Haimonti Dutta**,"Ethereal Strands", A Collection of Poems, Blue Pencil Publishers, Amazon Kindle Book, (2021).
2. **Haimonti Dutta**, "Gossip", Acrylic on Canvas, CALYX: A Journal of Art and Literature by Women, 32 (3), (2021).
3. **Haimonti Dutta**, "Parvati", Acrylic on Canvas, CALYX: A Journal of Art and Literature by Women, 32 (3), (2021).
4. **Haimonti Dutta**, "Three paintings depicting monsoon in the villages of Bengal", Water Color - Bengal School Wash Technique, The Woman Inc., Special Issue on "On Monsoon, Rains and Water" (2021).
4. **Haimonti Dutta**, "Bhavana", Little Magazine - Vol. 1 - 10, (2020-25)
5. **Haimonti Dutta**, Several poems and paintings published in Rhyvers (https://rhyvers.com/category/poems/), Learning and Creativity (LnC, https://learningandcreativity.com/), Sanskriti Bengali Association of Western New York.

## COMMUNITY SERVICE

1. Volunteer, Country Parkway Elementary School, Williamsville School District for reading books, poetry reading sessions, organizing science workshops, craft sessions, teaching problem solving and elementary level maths, Diversity, Equity and Inclusion talks.

2. Volunteer, Buffalo and Eerie County Public Library for organizing book clubs and art exhibitions.
3. V.P. of Committees, PTSA Williamsville East High School.

**AFFILIATIONS**
Member of:

1. Association for Computing Machinery (ACM).
2. Institute of Operations Research and Management Sciences (INFORMS).
3. Decision Sciences Institute (DSI)
4. Institute of Electrical and Electronics Engineers (IEEE).
5. Center for Women in Technology, UMBC
6. Center for Women In Technology (CWIT), Columbia University, NY.

**REFERENCES**
To be given on request.