



Dr. Soumya Sen

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Short Biography

Dr. Soumya Sen is an Assistant professor in A. K. Choudhury School of Information Technology and also Teacher-In-Charge in the Department of 1st Year of 4 Years of B.Tech under University of Calcutta. Dr. Sen has joined A. K. Choudhury School of Information Technology in March, 2009. He has been awarded with Ph.D. (Tech) degree in 2016 from Department of Computer Science & Engineering, University of Calcutta. He obtained his M.Tech. Degree in Computer Science & Engineering and M.Sc. in Computer & Information Science also from University of Calcutta. Before joining A. K. Choudhury School of Information Technology Dr. Sen also worked in IBM India Pvt. Ltd and RS Software. His industrial expertization includes ERP & Data Warehouse. Currently his research area interests are Data Warehouse & OLAP Tool, Big Data, Service Engineering, Distributed Database.

Dr. Sen has around 85 research papers published in Peer reviewed journals and International Conferences. He has 3 patents registered in USA, Japan & South Korea. He has also published 2 books with Springer in the form of Springer Briefs. His research collaborations include Institutes like Ca' Foscari University, Italy; Winona State University, USA; Ryutsu Keizai University, Japan; Ara Institute of Canterbury, New Zealand; California State University, USA; National Institute of Technology, Duragapur, India etc . Dr. Sen is also PC member and reviewer of many International conferences across the world.

His administrative experience includes the responsibility of Teacher-In-Charge in the Department of 1st Year of 4 Years of B.Tech under University of Calcutta since April 2017. He is also Assistant Course Co-Ordinator of M.Tech in Computer Engineering and Application (MCEA)

since September 2011. Dr. Sen is member of various committees of University of Calcutta and other Institutes.

Patent:

Title: Hyper-Lattice Model for Optimized Sequencing of Online Analytical Processing (OLAP) Operations on Data Warehouses

Authors : Nabendu Chaki & Soumya Sen

- 1. Patent Issued in South Korea on 05.06.2015; Patent No. 10-1526514**
- 2. Patent Issued in USA on 07.04.2015; Patent No. 9,002,782**
- 3. Patent Issued in Japan on 26.11.2014; Patent No. 5629821**

Book:

- 1. Soumya Sen, Anjan Dutta, Nilanjan Dey "Audio Processing and Speech Recognition Concepts, Techniques and Research Overviews", SpringerBriefs in Applied Sciences and Technology, March 2019**
- 2. Soumya Sen, Agostino Cortesi, Nabendu Chaki "Hyper-lattice Algebraic Model for Data Warehousing", SpringerBriefs in Applied Sciences and Technology, February 2016 ISBN: 978-3-319-28042-4**

Publications:

- **Journal:**

- 1. Partha Ghosh, Deep Sadhu, Soumya Sen "A real-time business analysis framework using virtual data warehouse" Accepted for publication in Arab Journal of Information Technology ISSN:1683-3198 (Science Citation Index Expanded, Web of Science, Scopus)**
- 2. Giridhar Maji, Sharmistha Mandal, Soumya Sen "Cover Independent Image Steganography in Spatial Domain Using Higher Order Pixel Bits" Accepted for publication in Springer Journal of Multimedia Tools and Applications ISSN: 1573-7721 (Science Citation Index Expanded, Web of Science, Scopus)**
- 3. Giridhar Maji, Debomita Mondal, Nilanjan Dey, Narayan C Debnath, Soumya Sen "Stock Prediction and Mutual Fund Portfolio Management Using Curve Fitting Techniques" Accepted for publication in Springer Journal of Ambient Intelligence and Humanized Computing ISSN: 1868-5145 (Science Citation Index Expanded, Web of Science, Scopus)**
- 4. Partha Ghosh, Soumya Sen, Agostino Cortesi "Skyline Computation over Multiple Points and Dimensions" Accepted for Publication in Springer**

- Innovations in Systems and Software Engineering ISSN: 1614-5054 (Web of Science, Scopus, ESCI)
5. Achyut Ghosh, Soumik Bose, **Soumya Sen**, Giridhar Maji, Narayan C. Debnath "**Mutual Fund Portfolio Management Using LSTM**" ISCA International Journal of Computers and Their Applications Vol. 27 No. 2 (June 2020) Page 65-73 ISSN: 1076-5204
 6. Giridhar Maji, Sharmistha Mandal, **Soumya Sen** "**A Systematic Survey on Influential Spreaders Identification in Complex Networks with a Focus on K-shell Based Techniques**" Accepted for Publication in Elsevier Expert Systems with Applications (ESWA) (Science Citation Index Expanded, Web of Science, Scopus)
 7. Anjan Dutta, Atreyee Mondal, Nilanjan Dey, **Soumya Sen**, Luminița Moraru, Aboul Ella Hassanien "**Vision Tracking: A Survey of the State-of-the-Art**" Springer SN Computer Science 1, Article Number 57 (2020) ISSN: 2661-8907
 8. Giridhar Maji, Sharmistha Mandal, **Soumya Sen** "**Dual Image-based Dictionary Encoded Data Hiding in Spatial Domain**" Accepted for Publication in IGI Global International Journal of Information Security and Privacy (IJISP) Vol 14 Issue 2 Article 5 (2020) Pages 19 ISSN: 1930-1650 (Web of Science, Scopus, ESCI)
 9. Saubhik Paladhi, Sankhadeep Chatterjee, Takaaki Goto, **Soumya Sen** "**AFARTICA: A Frequent Item-set Mining Method Using Artificial Cell Division Algorithm**" IGI Global Journal of Database Management Vol. 30 Issue 3, Page 71-93 Jul-Sep 2019 ISSN: 1063-8016 (Science Citation Index Expanded, Web of Science, Scopus)
 10. Sankhadeep Chatterjee, Nilanjan Dey, **Soumya Sen** "**Soil Moisture Quantity Prediction using Optimized Neural Supported model for Sustainable Agricultural Applications**" Accepted for Publication in Elsevier Sustainable Computing Informatics and Systems. ISSN: 2210-5379 (Science Citation Index Expanded, Web of Science, Scopus)
 11. Partha Ghosh, Takaaki Goto, **Soumya Sen** "**Taxicab Geometry Based Analysis on Skyline for Business Intelligence**" IGI-Global International Journal of Software Innovation (IJSI) Vol 6 Issue 4 (2018) Page 86-102 ISSN: 2166-7160 (Web of Science, Scopus, ESCI)
 12. Debomita Mondal, Giridhar Maji, Takaaki Goto, Narayan C Debnath, **Soumya Sen** " **A Data Warehouse Based Modelling Technique for Stock Market Analysis**" International Journal of Engineering & Technology Volume 7 Number 3.13 Page 165-170 July 2018 ISSN 2227-524X
 13. Amlan Chatterjee, Hugo Flores, **Soumya Sen**, Khondker Hasan, Ashish Mani "**IoT based algorithms for distributed location detection for flights**" Accepted for Publication in Inderscience International Journal of Hybrid Intelligence. ISSN: 2515-4281
 14. Sankhadeep Chatterjee, Nilanjan Dey, Fuqian Shi, Amira S. Ashour, Simon James Fong, **Soumya Sen** " **Clinical application of modified bag-of-features coupled with hybrid neural-based classifier in dengue fever classification using gene expression data**" Springer Medical & Biological Engineering &

- Computing, Vol. 56 Issue. 4 Page 709-720, April 2018. ISSN: 1741-0444 (Science Citation Index, Web of Science,Scopus)
15. Biswajit Maity , **Soumya Sen** , Narayan C Debnath “**Challenges of Implementing Data Warehouse in MongoDB Environment**” Journal of Fundamental and Applied Sciences Vol. 10 Issue 4S, Page 222-228, March 2018. ISSN: 1112-9867
 16. Sankhadeep Chatterjee, Sarbartha Sarkar, Nilanjan Dey, **Soumya Sen** "Non-Dominated Sorting Genetic Algorithm-II-Induced Neural-Supported Prediction of Water Quality with Stability Analysis" World Scientific Journal of Information & Knowledge Management (Web of Science,Scopus, ESCI) <https://doi.org/10.1142/S0219649218500168>
 17. Sankhadeep Chatterjee, Sarbartha Sarkar, Nilanjan Dey, Amira Ashour, **Soumya Sen**, Aboul Ella Hassanien "Application of Cuckoo Search in Water Quality Prediction using Artificial Neural Network" Inderscience International Journal of Computational Intelligence Studies, Vol.6 No.2/3, Page 229-244, Dec 2017. ISSN: 1755-4977 (DBLP)
 18. **Soumya Sen**, Santanu Roy,Anirban Sarkar, Nabendu Chaki, Narayan C Debnath "Dynamic Discovery of Query Path on the Lattice of Cuboids using Hierarchical Data Granularity and Storage Hierarchy" Elsevier Journal of Computational Science, Volume 5 Issue 4, July 2014, Page 675-683 <http://dx.doi.org/10.1016/j.jocs.2014.02.006> (Science Citation Index Expanded, Scopus, Web of Science)
 19. **Soumya Sen**, Ranak Ghosh, Debanjali Paul, Nabendu Chaki “**Integrating XML Data Into Multiple Rolap Data Warehouse Schemas**” AIRCC International Journal of Software Engineering & Applications (IJSEA); Volume 3, Number 1, Page 197-206, January 2012. ISSN : 0975 – 9018 ; DoI 10.5121/ijsea.2012.3114

- **Conference:**

1. Santanu Roy, Bibekananda Shit, **Soumya Sen** , Agostino Cortesi "Construction of Materialized Views in Non-Binary Data Space" Accepted for Publication in the Springer 8th International Doctoral Symposium on Applied Computations and Security Systems (ACSS 2021) Apr 9-10, 2021, Kolkata, India
2. Runa Ganguli, Priyanka Banerjee, Sanjib Halder, **Soumya Sen** "A Mathematical Recommendation Model to Rank Reviewers Based on Weighted Score for Online Review System" Accepted for Publication in the 2nd Springer International Conference on Emerging Technologies in Data Mining and Information Security (IEMIS 2020) July 2-4, 2020, Kolkata, India
3. Runa Ganguli, Akash Mehta, **Soumya Sen** "A Survey on Machine Learning Methodologies in Social Network Analysis" Accepted for Publication in the in the IEEE 8th International Conference on Reliability, Infocom Technologies and Optimization (ICRITO 2020) June 4-5,2020, Noida, India
4. Aishani Seal, Ankita Patra, Ranita Saha, Rohit Roy, **Soumya Sen** "A Hierarchical Graph Model for Disease Identification Based on Basic Symptoms" Accepted for

- Publication in the in the IEEE 8th International Conference on Reliability, Infocom Technologies and Optimization (ICRITO 2020) June 4-5,2020, Noida, India
5. Runa Ganguli, Akash Mehta, Narayan C. Debnath, Sultan Aljahdali, **Soumya Sen "An Integrated Framework for Friend Recommender System Using Graph Theoretic Approach"** Proc. of the 35th International Conference on Computers and Their Applications (CATA 2020) EPiC Series in Computing Volume 69,2020,Pages 242-255
 6. Subhadeep Ghosh, Santanu Roy, **Soumya Sen "An Efficient Recommendation System on E-Learning Platform by Query Lattice Optimization"** Accepted for Publication in the Springer 4th International Conference on Data Management, Analytics & Innovation (ICDMAI 2020) Jan 17-19, 2020, New Delhi, India
 7. Kushankur Ghosh, Arghasree Banerjee, Sankhadeep Chatterjee, **Soumya Sen "Imbalanced Twitter Sentiment Analysis using Minority Oversampling"** Accepted for Publication in the 10th International Conference on Awareness Science and Technology (iCAST 2019) Oct 23-25, 2019, Morioka, Japan
 8. Atreyee Mondal, Anjan Dutta, Nilanjan Dey, **Soumya Sen ,Fuqian Shi "Visual Traffic Surveillance: A Concise Survey"** Accepted for Publication in the 4th IOS Press International Conference on Information Technology and Intelligent Transportation System (ITITS 2019) Oct 19-20, 2019, Xian, China
 9. Soumik Bose, Achyut Ghosh, Giridhar Maji, Narayan Debnath, **Soumya Sen "Stock Price Prediction Using LSTM on Indian Share Market"** Accepted for Publication in the 32nd International Conference on Computer Applications in Industry and Engineering (CAINE 2019) Sep 30-Oct 2, 2019, San Diego, USA
 10. Giridhar Maji, Sharmistha Mandal, Narayan C. Debnath, **Soumya Sen "Pixel Value Difference Based Image Steganography with One Time Pad Encryption"** Accepted for Publication in the 17th International Conference on Industrial Informatics (INDIN 2019) Jul 22-25, 2019, Helsinki, Finland
 11. Sankhadeep Chatterjee, Sanmitra Kumar, Jeet Saha, **Soumya Sen "Hybrid Regression Model for Soil Moisture Quantity Prediction"** Accepted for Publication in the IEEE 5th International Conference on Opto-Electronics and Applied Optics (OPTRONIX-2019) Mar 18-20, 2019, Kolkata, India
 12. Giridhar Maji, Sharmistha Mandal, Narayan C. Debnath, **Soumya Sen "A Novel Delivery Model to Expand E-commerce Customers Based on Telecom Data Mining"** Accepted for Publication in the 34th International Conference on Computers and Their Applications (CATA 2019) Mar 18-20, 2019, Honolulu, USA
 13. Shouvik Chakraborty, Kalyani Mali, Aishwarya Raman, Sankhadeep Chatterjee, **Soumya Sen , Hanaa Hachimi " Contrast Optimization using Elitist Metaheuristic Optimization and Gradient Approximation for Biomedical Image Enhancement"** Accepted for Publication in the IEEE 1st Amity International Conference on Artificial Intelligence (AICAI 2019) Feb 4-6, 2019, Dubai, UAE
 14. Mousomi Roy, Shouvik Chakraborty, Kalyani Mali, Reshmi Debnath, Sankhadeep Chatterjee, **Soumya Sen "A Study on the Applications of the Biomedical Image Encryption Methods for Secured Computer Aided Diagnostics"** Accepted for Publication in the IEEE 1st Amity International Conference on Artificial Intelligence (AICAI 2019) Feb 4-6, 2019, Dubai, UAE
 15. Pallavi Saha, Sankhadeep Chatterjee, Santanu Roy, **Soumya Sen "Normal Pressure Hydrocephalus detection using Active Contour coupled Ensemble based**

- classifier"** Accepted for Publication in the Springer 3rd International Conference on Data Management, Analytics & Innovation (ICDMAI 2019) Jan 18-20,2019, Kuala Lumpur, Malaysia
16. Amlan Chatterjee, Rushabh Jitendrakumar Shah, **Soumya Sen "Pattern Matching Based Algorithms for Graph Compression"** Accepted for Publication in 4th IEEE International Conference on Research in Computational Intelligence and Communication Networks (ICRCICN 2018) Nov 22-23, 2018, Kolkata, India
 17. Shouvik Chakraborty, Kalyani Mali, Sankhadeep Chatterjee, Saptarsi Goswami, Amlan Chatterjee, **Soumya Sen "Automated Breast Cancer Identification by analyzing Histology Slides using Metaheuristic Supported Supervised Classification coupled with Bag-of-Features"** Accepted for Publication in 4th IEEE International Conference on Research in Computational Intelligence and Communication Networks (ICRCICN 2018) Nov 22-23, 2018, Kolkata, India
 18. Rashmi Mandal Vijavyvergiya, Partha Ghosh, Lalmohan Dutta, Runa Ganguli, Narayan Debnath, **Soumya Sen "System Architecture of Mobile Application for Emergency Medical Situation and Continuous Monitoring"** Accepted for Publication in the 31st International Conference on Computer Applications in Industry and Engineering (CAINE 2018) Oct 8-10, 2018, New Orleans, USA
 19. Lalmohan Dutta, Giridhar Maji, **Soumya Sen "A Study on Spatio-temporal Topical Analysis of Twitter Data"** Accepted for Publication in the 1st Springer International Conference on Emerging Technology in Modeling and Graphics (IEMGraph 2018) Sep 6-7,2018, Kolkata, India
 20. Abriti Paul, Sourav Ghosh, Amit Kumar Das, Saptarsi Goswami, Sruti Das Choudhury, **Soumya Sen "A Review on Agricultural Advancement Based on Computer Vision and Machine Learning"** Accepted for Publication in the 1st Springer International Conference on Emerging Technology in Modeling and Graphics (IEMGraph 2018) Sep 6-7,2018, Kolkata, India
 21. Sankhadeep Chatterjee, Nilanjan Dey, Amira S. Ashour, **Soumya Sen, Fuqian Shi "Structural Failure Prediction in Multi Storied Reinforced Concrete Buildings using Cuckoo Search Optimization Combined with Neural Network"** Accepted for Publication in the 3rd IOS Press International Conference on Information Technology and Intelligent Transportation System (ITITS 2018) Sep 15-16, 2018, Xian, China
 22. Partha Ghosh, **Soumya Sen "Business Intelligence Development by Analysing Customer Sentiment"** Accepted for Publication in the IEEE 7th International Conference on Reliability, Infocom Technologies and Optimization (ICRITO 2018) Aug 29-31, 2108, Noida, India
 23. Giridhar Maji, Narayan C Debnath, **Soumya Sen "Data Warehouse Based Analysis with Integrated Blood Donation Management System"** Accepted for Publication in the 16th International Conference on Industrial Informatics (INDIN 2018) July 18-20, 2018, Porto, Portugal
 24. Biswajit Maity, Anal Acharya, Takaaki Goto, **Soumya Sen "A Framework to Convert NoSQL Based Data Models to Relational Model"** Accepted for Publication in the 6th ACM/ACIS International Conference on Applied Computing & Information Technology (ACIT 2018) June 13-15, 2018, Kunming, China
 25. Lalmohan Dutta, Giridhar Maji, Partha Ghosh, **Soumya Sen "An Integrated Blood Donation Campaign Management System"** Accepted for Publication in the 1st

- Springer International Conference on Contemporary Advances in Innovative & Applicable Information Technology (ICCAIAIT 2018) Mar 24-25, 2018, Kolkata, India.
26. Partha Ghosh, Leena Jana Ghosh, Subhajit Guha, Narayan C Debnath, **Soumya Sen "Reducing Computational Complexity of Skyline by the use of Logical and Physical Bucket"** Accepted for Publication in the 1st Springer International Conference on Contemporary Advances in Innovative & Applicable Information Technology (ICCAIAIT 2018) Mar 24-25, 2018, Kolkata, India.
 27. Sinthia Roy, Arijit Banerjee, Partha Ghosh, Amlan Chatterjee, **Soumya Sen "Intelligent Web Service Searching Using Inverted Index"** Accepted for Publication in the 1st Springer International Conference on Contemporary Advances in Innovative & Applicable Information Technology (ICCAIAIT 2018) Mar 24-25, 2018, Kolkata, India.
 28. Santanu Roy, **Soumya Sen** , Narayan C Debnath "**Optimal Query Path Selection in Lattice of Cuboids using Novel Heuristic Search Algorithm**" Accepted for Publication in 33rd International Conference on Computers and Their Applications (CATA 2018) Mar 19-21,2018, Las Vegas, USA
 29. Giridhar Maji, Lalmohan Dutta, **Soumya Sen "Targeted Marketing and Market share analysis on POS payment data using DW and OLAP"** Accepted for Publication in the 1st Springer International Conference on Emerging Technologies in Data Mining and Information Security (IEMIS 2018) Feb 23-25, 2018, Kolkata, India
 30. Ishita Das, Santanu Roy, Amlan Chatterjee, **Soumya Sen " A Data Warehouse Based Schema Design on Decision Making in Loan Disbursement for Indian Advance Sector"** Accepted for Publication in the 1st Springer International Conference on Emerging Technologies in Data Mining and Information Security (IEMIS 2018) Feb 23-25, 2018 Kolkata, India
 31. Giridhar Maji, Sharmistha Mandal, **Soumya Sen**,Narayan C Debnath "**Dual Image based LSB Steganography**" Accepted for Publication in the 2nd IEEE International Conference on Recent Advances in Signal Processing, Telecommunications & Computing (SigTelCom2018) Jan 29-31, 2018, Ho Chi Minh City, Vietnam
 32. Sankhadeep Chatterjee, Bimal Dutta, **Soumya Sen**, Nilanjan Dey, Narayan C Debnath "**Rainfall Prediction using Hybrid Neural Network approach**" Accepted for Publication in the 2nd IEEE International Conference on Recent Advances in Signal Processing, Telecommunications & Computing (SigTelCom2018) Jan 29-31, 2018, Ho Chi Minh City, Vietnam
 33. Amlan Chatterjee, Hugo Flores, **Soumya Sen**, Khondker S. Hasan, Ashish Mani "**Distributed Location Detection Algorithms using IoT for Commercial Aviation**" Proc. of the 3rd IEEE International Conference on Research in Computational Intelligence and Communication Networks (ICRCICN 2017) Nov 3-5, 2017, Kolkata, India. doi: 10.1109/ICRCICN.2017.8234493
 34. Partha Ghosh,Deep Sadhu, **Soumya Sen** , Narayan C Debnath "**Service Modeling for Virtual Data Warehouse**" Proc. of the 30th International Conference on Computer Applications in Industry and Engineering (CAINE 2017) Oct 2-4, San Diego, California, USA. ISBN:978-1-943436-08-8
 35. Sankhadeep Chatterjee, Sarbartha Sarkar, Nilanjan Dey, **Soumya Sen**, Takaaki Goto, Narayan C Debnath "**Water Quality Prediction: Multi Objective Genetic Algorithm coupled Artificial Neural Network based Approach**" Proc. of the 15th International

- Conference on Industrial Informatics (INDIN 2017) July 24-26, Emden, Germany. doi: 10.1109/INDIN.2017.8104902
36. Partha Ghosh, Takaaki Goto, **Soumya Sen "Computing Skyline using Taxicab Geometry"** Accepted for Publication in the 5th IEEE International Conference Applied Computing & Information Technology (ACIT 2017) July 9-13 Hamamatsu, Japan
 37. Sankhadeep Chatterjee, Rhitaban Nag, **Soumya Sen**, Amitrajit Sarkar "**Towards Golden Rule of Capital Accumulation: A Genetic Algorithm Approach**" Proc. of the Springer 16th International Conference on Computer Information Systems and Industrial Management Applications (CISIM 2017) June 16-18, Bialystok, Poland. ISBN:978-3-319-59105-6
 38. Giridhar Maji, **Soumya Sen**, Amitrajit Sarkar "**Share market sectorial Indices movement forecast with lagged correlation and association rule mining**" Proc. of the Springer 16th International Conference on Computer Information Systems and Industrial Management Applications (CISIM 2017) June 16-18, Bialystok, Poland. ISBN:978-3-319-59105-6
 39. Sankhadeep Chatterjee, Simona Dzitac, **Soumya Sen**, Noemi Clara Rohatinovici, Nilanjan Dey, Amira S. Ashour, Valentina Emilia Balas "**Hybrid Modified Cuckoo Search-Neural Network in Chronic Kidney Disease Classification**" Proc. of the 14th International Conference on Engineering of Modern Electric Systems (EMES 2017) June 1-2, Oradea, Romania. doi: 10.1109/EMES.2017.7980405
 40. Sankhadeep Chatterjee, Nilanjan Dey, **Soumya Sen**, Amira S. Ashour, Simon Fong, Fuqian Shi "**Modified Cuckoo Search based Neural Networks for Forest Types Classification**" Proc. of the 2nd IOS Press International Conference on Information Technology and Intelligent Transportation System (ITITS 2017), Volume: 296, Page 490-498 June 10, Xi'an, China
 41. Sankhadeep Chatterjee, Soumen Banerjee, Kaustav Guha Majumdar, Soumyadip Bose, **Soumya Sen "Non-dominated Sorting Genetic Algorithm - II supported Neural Network in Classifying Forest Types"** Proc. of the IEEE 1st International Conference on Electronics, Materials Engineering and Nano-Technology (IEMENTech 2017) Apr 28-29, Kolkata, India. doi: 10.1109/IEMENTECH.2017.8077015
 42. Sankhadeep Chatterjee, Soumen Banerjee, Pikorab Basu, Mainak Debnath, **Soumya Sen "Cuckoo Search coupled Artificial Neural Network in Detection of Chronic Kidney Disease"** Proc. of the IEEE 1st International Conference on Electronics, Materials Engineering and Nano-Technology (IEMENTech 2017) Apr 28-29, Kolkata, India. doi: 10.1109/IEMENTECH.2017.8077016
 43. Giridhar Maji, Sharmistha Mandal, Souvik Bhattacharya, **Soumya Sen "Designing Combo Recharge Plans for Telecom Designing Combo Recharge Plans for Telecom"** Proc. of the 18th IEEE International Conferences on Industrial Technology (ICIT 2017) Mar 22-25, Toronto, Canada. ISBN: 978-1-5090-5320-9
 44. Souvik Bhattacharya, Ananya Roy, **Soumya Sen**, Narayan C Debnath "**Distributed Data Recovery Architecture Based on Schema Segregation**" Proc. of the 18th IEEE International Conferences on Industrial Technology (ICIT 2017) Mar 22-25, Toronto, Canada. ISBN: 978-1-5090-5320-9
 45. Giridhar Maji, Sharmistha Mandal, **Soumya Sen**, Narayan C Debnath "**A Conceptual Model to Implement Smart Bus System using Internet**" 32nd International

- Conference on Computers and Their Applications (CATA 2017) Mar 20-22, Honolulu, Hawaii, USA.978-1-943436-06-4
46. Partha Ghosh, **Soumya Sen "An Alternative Solution of Skyline Operation to Reduce Computational Complexity"** Proc. of the IEEE 2nd International Conference on Research in Computational Intelligence and Communication Networks (ICRCICN 2016) Sept 23-25, Kolkata, India. ISBN:978-1-5090-1047-9
 47. Sudipta Kanjilal, **Soumya Sen "A Data Fusion Based Approach to Find Shortest Path Within a City for Different Time Periods"** Proc. of the IEEE 5th International Conference on Reliability, Infocom Technologies and Optimization (ICRITO 2016) Sept 7-9, Noida, India.ISBN:978-1-5090-1489-7
 48. Giridhar Maji, **Soumya Sen "Data warehouse based analysis on CDR to retain and acquire customers by targeted marketing"** Proc. of the IEEE 5th International Conference on Reliability, Infocom Technologies and Optimization (ICRITO 2016) Sept 7-9, Noida, India. ISBN:978-1-5090-1489-7
 49. Santanu Roy, Bibekananda Shit, **Soumya Sen "Association Based Multi-Attribute Analysis to Construct Materialized View"** Springer 3rd International Doctoral Symposium on Applied Computations and Security Systems (ACSS 2016) Aug 12-14, Kolkata, India. Advances in Intelligent Systems and Computing book series (AISC, volume 567) pp 115-131; ISBN: 978-981-10-3409-1; https://doi.org/10.1007/978-981-10-3409-1_8
 50. **Soumya Sen**, Agostino Cortesi, Nabendu Chaki **"ROLAP Based Data Warehouse Schema to XML Schema Conversion"** Proc. of the 17th IEEE International Conferences on Industrial Technoloy (ICIT) Mar 14- Mar 17, 2016, Taipei City, Taiwan. ISBN: 978-1-4673-8075-1
 51. Adrija Bhattacharya, **Soumya Sen**, Anirban Sarkar, Narayan C Debnath **"Hierarchical Graph Based Approach for Service Composition"** Proc. of the 17th IEEE International Conferences on Industrial Technoloy (ICIT) Mar 14- Mar 17, 2016, Taipei City, Taiwan. ISBN: 978-1-4673-8075-1
 52. Partha Ghosh, **Soumya Sen "Ranking Skyline points by computing Nearest Neighbor of Best Skyline Point"** Proc. of the 12th IEEE India International Conference (INDICON 2015) Dec 17-20, New Delhi, India. ISBN:978-1-4673-6540-6
 53. Giridhar Majhi, **Soumya Sen "A Data Warehouse Based Analysis on CDR to Depict Market Share of Different Mobile Brands"** Proc. of the 12th IEEE India International Conference (INDICON 2015) Dec 17-20, New Delhi, India. ISBN:978-1-4673-6540-6
 54. **Soumya Sen**, Partha Ghosh, Agostino Cortesi **"Materialized View Construction Using Linearizable Non-Linear Regression"** Proc. of the Springer 2nd International Doctoral Symposium on Applied Computations and Security Systems (ACSS 2015) May 23-25, Kolkata, India. ISBN:978-81-322-2648-2; DoI: 10.1007/978-81-322-2650-5
 55. Ranak Ghosh, Sujay Halder,**Soumya Sen "An Integrated Approach to Deploy Data Warehouse in Business Intelligence Environment"** Proc. of the IEEE 3rd International Conference on Computer, Communication, Control and Information Technology (C3IT 2015) Feb 7-8, Adisaptagram, Hooghly, India. ISBN:978-1-4799-4446-0 DOI:10.1109/C3IT.2015.7060115
 56. Santanu Roy, Ranak Ghosh,**Soumya Sen "Materialized View Construction Based on Clustering Technique"** Proc. of the Springer LNCS 13th International Conference on

- Information System and Industrial Management (CISIM 2014)Nov 5-7, Ho Chi Minh City, Vietnam. ISBN: 978-3-662-45236-3
57. Partha Ghosh, Soumya Sen "**Dynamic Incremental Maintenance of Materialized View Based on Attribute Affinity**" Proc. of the IEEE 2nd International Conference on Data Science & Engineering (ICDSE 2014)Aug 26-28, Kochi, India. ISBN 978-1-4799-6870-1
 58. Partha Ghosh, Soumya Sen "**Materialized View Replacement using Markov's Analysis**" Proc. of the 15th IEEE International Conferences on Industrial Technology (ICIT) Feb 26- Mar 1, 2014, Busan, South Korea. ISBN: 978-1-4799-3938-1 ([Uploaded Paper](#))
 59. Partha Ghosh, Soumya Sen "**Time and Location Based Summarized PageRank Calculation of Web Pages**" Proc. of the 15th IEEE International Conferences on Industrial Technology (ICIT) Feb 26- Mar 1, 2014, Busan, South Korea. ISBN: 978-1-4799-3938-1
 60. Santanu Roy, Soumya Sen, Anirban Sarkar, Nabendu Chaki, Narayan C Debnath "**DynamicQuery Path Selection from Lattice of Cuboids Using Memory Hierarchy**", Proc. of the IEEE 5th IEEE Symposium on Computers and Communications (ICSS 2013) July 7-10, Split, Croatia. DoI: 978-1-4799-3755-4
 61. Partha Ghosh, Soumya Sen, Nabendu Chaki "**Materialized View Construction Using Linear Regression on Attributes**" IEEE Proc. of the 3rd International Conference on Emerging Applications of Information Technology (EAIT 2012), Kolkata, India, 30th Nov-1st Dec, 2012. ISBN: 978-1-4673-1825-9 ; DoI: 10.1109/EAIT.2012.6407899
 62. Soumya Sen, Anjan Dutta, Agostino Cortesi, Nabendu Chaki "**A New Scale for Attribute Dependency in Large Database Systems**" Springer LNCS Proc. of the 11th International Conference on Information System and Industrial Management (CISIM 2012), Venice, Italy, 26-28 September, 2012. ISBN: 978-3-642-33259-3 ; DoI: 10.1007/978-3-642-33260-9_23.
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