Animesh Dutta
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Department of Computer Science and Engineering.
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Research interest
Agentic AI and LLM
Multi-agent Systems
Big Data & Social Network Analysis
Deep Learning on Graph Analytics

Education
PhD (2013), Jadavpur University, Kolkata, West Bengal, India.
M.Tech (2006), National Institute of Technology, Durgapur, West Bengal, India.
B.E. (2002), Regional Engineering College (NIT), Durgapur, West Bengal, India.

PhD Thesis Supervision

Sl No.	Name of scholar	Thesis title	Status
1	Ms. Poulami Dalapati	Multiagent Based Algorithmic Approach for Railway Scheduling, Collision Handling and Optimization	Awarded on 5th June 2018
2	Mr. Bikash Choudhury	An Efficient Service Oriented Middleware for SOC in Mobile Ad Hoc Network	Awarded on 19th April 2019
3	Mr. Abhijit Adhikari	A Framework for Measuring the Semantic Relatedness between Concepts	Awarded on 6th June 2019
4	Ms. Amrita Namtirtha	Identifying Influential Spreaders: A Graph Analytics Approach	Awarded on 15th June 2020
5	Mr. Narayan Changder	Novel Algorithms for Multi-Agents Coalition Structure Generation	Awarded on 25th March 2021
6	Ms. Sangeeta Sen	A Graph Data Model in Semantic Web Environment	Awarded on 17th August 2021
7	Ms. Samriddhi Sarkar	Coalition Formation in Multi-agent Systems	Awarded on 4th August 2023
8	Ms. Arunita Das	Enhancement of Partitional Clustering Techniques for Pathology Image Segmentation	Awarded on 13th January 2025
9	Mr. Amit Paul	Location Prediction in Social Media using Hybrid Modelling	Awarded on 27th March 2025
10	Mr. Tuhin Kr. Biswas	Coalition Formation of Multi-agent Systems in Heterogeneous Environment	Thesis submitted on 15th Dec 2025
11	Mr. Suman Nandi	Identifying Influential Spreaders through Network Analysis	Thesis submitted on 27th Jan 2026
12	Ms. Srestha Sadhu	Influential Spreaders Identification Across a Diverse Range of Networks	Ongoing
13	Ms. Nilanjana Saha	Mining Social Graphs to Identify Leaders in Network Activities	Ongoing
14	Ms. Devlina Karmakar	—	Ongoing
15	Ms. Suchismita Sarkar	—	Ongoing

PhD Thesis Supervision (Contd...)

Sl No.	Name of scholar	Thesis title	Status
16	Ms. Sarjita Soo	—	Ongoing

Current/past research projects (National)		
Sl No.	**Sponsoring Agency**	**Title of the Project**
1	Science Engineering & Research Board (SERB) Sanction Order No. MTR/2023/000267	Coalition Formation in Multi Agent Systems: An Algorithmic Approach
2	Department of Science and Technology. Ref No. SB/FTP/ETA-407/2013	Agent Based Algorithmic Approach for Modeling and Optimization of Indian Railway System
3	Department of Science and Technology. Ref No. DST/KIRAN/GE-1/2019/17	Gender Advancement for Transforming Institutions (GATI) Pilot Project
4	Department of Electronics and Information Technology (DeitY). Ref No. 11(16)/2012-ELG.	Development of Personalized and Performance based E-Learning tool for existing E-resources
Current/past research projects (International)		
5	European Union (with Polytechnic of Porto, Portugal)	Erasmus + ICM (International Credit Mobility)
6	Department of Science and Technology. Ref No. DST/INTPORTUGAL/P-06/2017 (with University of Minho and ISCAP Polytechnic of Porto, Portugal)	Empower SSE: A Linked Open Data Framework for the Empowerment of Social and Solidarity Economy Agents

Lab to Land deliverables:

- `http://www.eguru.org.in/` : A personalized and performance based E-Learning tool.

- `http://empowersse.net/` :Tool for empowerment of informal sector's worker of India.

- Railway Network Simulator for Indian Railway.

Award and recognition:

- Delegation to Seventh BRICS Working Group Meeting on ICT & HPC and WAIC 2023 (World AI Conference) at East China Normal university, Shanghai, P. R. China, during July 6-10, 2023.

- GATI (Gender Advancement for Transforming Institutions) study visit to UK universities during 27th-31st March 2023 funded by DST, Govt of India, British Council and Advance HE UK.

- ASEM-DUO Professor Fellowship 2020 with Claude Beranard University Lyon 1, France, by European Union

- Delegation of young Indian leaders to "Discover Israel" program, Israel, 1st - 7th Sept 2018.

- Delegation to First BRICS Working Group Meeting and Innovation Collaboration Forum on ICT and HPC, Guangzhou, 23rd -26th April 2017.

- Visvesvaray Young Faculty Research Fellowship Award in 2016, by Ministry of Electronics and Information Technology, Govt. of India.

Research Collaboration:
National:

- **Dr. Biswanath Dutta,** Assistant Professor, Documentation Research and Training Centre (DRTC), Indian Statistical Institute (ISI), India.

International:

- **Prof. Samir Aknine,** Department of Computer Science and Engineering, Claude Bernard University of Lyon 1, France

- **Prof. Ana Alice Baptista,** Algorithmic Research Centre, University of Minho, Portugal

- **Dr. Mariana Curado Malta,** Information System Department, ISCAP Polytechnic of Porto, Portugal

- **Prof. Frans Coenen,** Department of Computer Science and Engineering, University of Liverpool,UK

- **Prof. Viviana Mascardi,** DIBRIS - Department of Computer Science, Bioengineering, Robotics and Systems Engineering, Faculty Member, University of Genova, Italy

Foreign visit for academic purpose:

- Thirty-ninth AAAI Conference on Artificial Intelligence (AAAI-25) in Philadelphia, USA, February 25- March 4, 2025.

- Delegation to Seventh BRICS Working Group Meeting on ICT & HPC and WAIC 2023 (World AI Conference) at East China Normal university, Shanghai, P. R. China, during July 6-10, 2023.

- Delegation to GATI (Gender Advancement for Transforming Institutions) study visit to UK universities during 27th-31st March 2023 funded by DST, Govt of India, British Council and Advance HE UK.

- Research Visit to Polytechnic of Porto, Portugal under ERASMUS+ICM (International Credit Mobility) Project funded by Euoropean Union during January 16-20, 2023.

- Thirty-fourth AAAI Conference on Artificial Intelligence (AAAI-20) in New York, USA, February 7-12, 2020.

- AAAI 2019 Spring Symposium on Combining Machine Learning with Knowledge Engineering (AAAI-MAKE) at Stanford University, USA, March 25-29, 2019

- Thirty-third AAAI Conference on Artificial Intelligence (AAAI-19) at Honolulu Hawaii, USA, January 27- February 1, 2019

- Delegation to Discover Israel Program, Israel, in September 1-7, 2018

- 10th International Conference on Agents and Artificial Intelligence (ICAART) at Funchal, Madeira-Portugal, January 16-18, 2018.

- Collaborative research programme/visit to University of Minho, Guimaraes-Portugal, January 19-26, 2018.

- Collaborative research programme/visit to Guangzhou Milestone Software Co. Ltd, Guangzhou, Guanghzou, P. R. China, December 17-30, 2017

- Delegation to First BRICS Working Group Meeting and Innovation Collaboration Forum on ICT and HPC at Guanghzou, P.R. China, April 23-26, 2017

- The 12th Semantic Web Summer School (SSSW 2016) at Bertinoro, near Bologna, Italy, July 17-23, 2016.

- Research Visit to University of Genova, Italy, July 25-27, 2016.

- IEEE Region 10 TENCON 2016 Conference at Marina Bay Sands, Singapore, November 22-25, 2016

- International Conference on Principles and Practice of Multi-Agent Systems (PRIMA), Phuket Thailand, August 22-26, 2016.

- 12th International Conference on Practical Applications of Agents and Multi-Agent Systems (PAAMS 2014), at Salamanca, Spain, June 4-6, 2014.

- Research Visit to BISITE (Bioinformatic, Intelligent Systems and Educational Technology) Research Group, University of Salamance, Spain, June 7-21, 2014.

- Research Visit at the Agents, Interaction and Complexity Group, School of Electronics and Computer Science, University of Southampton, UK, June 17-30, 2013.

- 15th European Agent System Summer School (EASSS-2013) at King's College London, UK, July 1-5, 2013.

- 24th International Conference on Software Engineering & Knowledge Engineering (SEKE'2012), Redwood City, San Francisco Bay, USA July 1-3, 2012.

- The 2010 International Conference on Software Engineering Research and Practice (SERP'10), Las Vegas, USA, July 12-15, 2010.

- IEEE Region 10 TENCON 2010 Conference at Fukuoka, Japan, November 21-24, 2010,

- The 8th WSEAS International Conference on Software Engineering, Parallel and Distributed Systems (SEPADS '09), at University of Cambridge, UK, February 21-23, 2009.

Publications:

Conferences

[1]   Nilanjana Saha and Animesh Dutta. "CRIME: Community Rewiring for Influence and Masking Entities in Social Networks". In: *Proceedings of the AAAI Conference on Artificial Intelligence 2026.* Accepted for publication, to appear.

[2]   Devlina Karmakar et al. "LP-GRU Model: A Graph Analytics Approach to Detect Misinformation Infiltrators in Online Communities". In: *2025 17th International Conference on COMmunication Systems and NETworks (COMSNETS).* IEEE. 2025, pp. 862–866.

[3] Suman Nandi, Giridhar Maji, and Animesh Dutta. "Exploring emerging spreaders through GCN-based link prediction and a novel centrality method". In: *2025 17th International Conference on COMmunication Systems and NETworks (COMSNETS)*. IEEE. 2025, pp. 1018–1022.

[4] Srestha Sadhu et al. "TGNN-Bet: Approximation of Temporal Betweenness Centrality using Temporal Graph Neural Network". In: *2025 17th International Conference on COMmunication Systems and NETworks (COMSNETS)*. IEEE. 2025, pp. 911–915.

[5] Srestha Sadhu et al. "TMGCN-ATT: A Traffic Prediction Model with Multi-Hop GCN and Self-Attention Mechanisms". In: *2025 17th International Conference on COMmunication Systems and NETworks (COMSNETS)*. IEEE. 2025, pp. 950–954.

[6] Nilanjana Saha et al. "Hide Exposures by Removing Masterminds External Sources on Social Network". In: *Accepted in: The 39th Annual AAAI Conference on Artificial Intelligence 2025(AAAI)*. AAAI. 2025.

[7] Sarjita Soo et al. "Identification of Phishing Mechanism of the Mastermind of Anomaly Community in the Social Networks". In: *2025 17th International Conference on COMmunication Systems and NETworks (COMSNETS)*. IEEE. 2025, pp. 926–930.

[8] Tuhin Kumar Biswas, Ankit Roy, and Animesh Dutta. "Utility-Profit Based Large-Scale Simultaneous Coalition Structure Generation and Assignment in Constrained Environments". In: *Accepted in: The 23rd IEEE/WIC International Conference on Web Intelligence and Intelligent Agent Technology (WI-IAT)*. IEEE. 2024.

[9] Tuhin Kumar Biswas et al. "Coalition Formation for Task Allocation Using Multiple Distance Metrics". In: *Proceedings of the AAAI Conference on Artificial Intelligence*. Vol. 38. 21. 2024, pp. 23443–23444.

[10] Suman Nandi and Animesh Dutta. "Local closeness gravity model to identify the vital nodes in complex networks". In: *16th International Conference on COMmunication Systems & NETworkS (COMSNETS)*. IEEE. 2024.

[11] Suman Nandi, Dwiparna Mandal, and Animesh Dutta. "CCC: A spreader selection approach to control spreading dynamics in complex networks". In: *Accepted in: The 23rd IEEE/WIC International Conference on Web Intelligence and Intelligent Agent Technology (WI-IAT)*. IEEE. 2024.

[12] Srestha Sadhu et al. "LPC: A Local Path-Based Centrality Method for Identifying Influential Nodes in Temporal Networks". In: *Accepted in: 8th International Conference on Data Science and Management of Data (12th ACM IKDD CODS and 30th COMAD)*. ACM. 2024.

[13] Nilanjan Saha, Amrita Namtirtha, and Animesh Dutta. "CM-GCN: Crossbred Method based-Graph Convolution Networks for identifying influential spreaders from directed networks". In: *16th International Conference on COMmunication Systems & NETworkS (COMSNETS)*. IEEE. 2024.

[14] Nilanjana Saha, Amrita Namtirtha, and Animesh Dutta. "Hide Mastermind using an Intermediate Connection on Social Network". In: *2024 IEEE 31st International Conference on High Performance Computing, Data and Analytics Workshop (HiPCW)*. IEEE. 2024, pp. 99–100.

[15] Anju Bhuiya et al. "Semi-Global Circular Centrality to find Influential Spreaders". In: *2023 15th International Conference on COMmunication Systems & NETworkS (COMSNETS)*. IEEE. 2023, pp. 483–485.

[16] Koyena Chowdhury, Amit Paul, and Animesh Dutta. "CancelOut GCN Diffusion (CoutGCN): Finding the Influential Spreaders to Diffuse Information". In: *2023 15th International Conference on COMmunication Systems & NETworkS (COMSNETS)*. IEEE. 2023, pp. 368–372.

[17] Arunita Das, Amrita Namtirtha, and Animesh Dutta. "Membership Adjusted Superpixel based Fuzzy C-Means for White Blood Cell Segmentation". In: *10th International Conference on Pattern Recognition and Machine Intelligence (PReMI'23)*. 2023.

[18] Suman Nandi et al. "IS-PEW: identifying influential spreaders using potential edge weight in complex networks". In: *International Conference on Complex Networks and Their Applications*. Springer. 2023, pp. 309–320.

[19] Srestha Sadhu, Anju Bhuiya, and Animesh Dutta. "DSGCN: A Degree Strength Graph Convolution Network for Identifying Influential Nodes in Complex Networks". In: *2023 IEEE/WIC International Conference on Web Intelligence and Intelligent Agent Technology (WI-IAT)*. IEEE. 2023, pp. 330–334.

[20] Srestha Sadhu et al. "STC+ K: a Semi-global triangular and degree centrality method to identify influential spreaders in complex networks". In: *2023 IEEE/WIC International Conference on Web Intelligence and Intelligent Agent Technology (WI-IAT)*. IEEE. 2023, pp. 655–662.

[21] Nilanjana Saha, Amrita Namtirtha, and Animesh Dutta. "Crossbred method: A new method for identifying influential spreaders from directed networks". In: *International Conference on Complex Networks and Their Applications*. Springer. 2023, pp. 388–400.

[22] Samriddhi Sarkar et al. "P-tacos: A parallel tabu search algorithm for coalition structure generation". In: *2023 IEEE/WIC International Conference on Web Intelligence and Intelligent Agent Technology (WI-IAT)*. IEEE. 2023, pp. 367–371.

[23] Arunita Das, Amrita Namtirtha, and Animesh Dutta. "Automatic Fast Fuzzy Clustering Algorithm for Nucleus Segmentation of Color Pathology Images". In: *2022 IEEE 19th India Council International Conference (INDICON)*. IEEE. 2022, pp. 1–6.

[24] Narayan Changder et al. "BOSS: A Bi-directional Search Technique for Optimal Coalition Structure Generation with Minimal Overlapping". In: *Proceedings of the 35th Annual AAAI Conference on Artificial Intelligence* 35.18 (May 2021), pp. 15765–15766.

[25] Arpan Barman et al. "Food Safety Network for Detecting Adulteration in Unsealed Food Products Using Topological Ordering". In: *Proceedings of 12th Asian Conference, ACIIDS 2020, Phuket, Thailand, March 23-26*, 2020.

[26] Narayan Changder et al. "ODSS: Efficient Hybridization for Optimal Coalition Structure Generation." In: *Proceedings of the 34th Annual AAAI Conference on Artificial Intelligence, New York, USA, February 7-12*. 2020, pp. 7079–7086.

[27] Krishnendu Kundu and Animesh Dutta. "Multi-agent Based Distributed MIS Selection for Dynamic Job Scheduling". In: *The 2020 IEEE/WIC/ACM International Joint Conference on Web Intelligence and Intelligent Agent Technology (WI-IAT'20), Melbourne, Australia, December 14-17*, IEEE, 2020, pp. 234–241.

[28] Samriddhi Sarkar, Mariana Curado Malta, and Animesh Dutta. "A Coalition Formation Framework for Platform Cooperatives of Smallholder Farmers". In: *The 2020 IEEE/WIC/ACM International Joint Conference on Web Intelligence and Intelligent Agent Technology (WI-IAT'20), Melbourne, Australia, December 14-17*, IEEE. 2020, pp. 803–809.

[29] Sangeeta Sen et al. "Labeled k-partite Graph for Statement Annotation in the Web of Data". In: *The 2020 IEEE/WIC/ACM International Joint Conference on Web Intelligence and Intelligent Agent Technology (WI-IAT'20), Melbourne, Australia, December 14-17*, IEEE, 2020, pp. 63–71.

[30] Priyam Tyagi, Mariana Malta, and Animesh Dutta. "Hashing for cleaner reverse engineered queries for the Entity Comparison Problem in RDF Graphs". In: *The 2020 IEEE/WIC/ACM International Joint Conference on Web Intelligence and Intelligent Agent Technology (WI-IAT'20), Melbourne, Australia, December 14-17*, IEEE, 2020, pp. 177–186.

[31] Narayan Changder, Samir Aknine, and Animesh Dutta. "An Effective Dynamic Programming Algorithm for Optimal Coalition Structure Generation". In: *2019 IEEE 31st International Conference on Tools with Artificial Intelligence (ICTAI)*. IEEE. 2019, pp. 721–727.

[32] Narayan Changder, Samir Aknine, and Animesh Dutta. "An Imperfect Algorithm for Coalition Structure Generation". In: *Proceedings of the 33rd Annual AAAI Conference on Artificial Intelligence, Honolulu, Hawaii, USA, January 27 - February 1*. Vol. 33. 2019, pp. 9923–9924.

[33] Narayan Changder, Samir Aknine, and Animesh Dutta. "An Improved Algorithm for Optimal Coalition Structure Generation". In: *Twelfth Annual Symposium on Combinatorial Search, Napa, California, 16-17 July.* 2019.

[34] Narayan Changder, Samir Aknine, and Animesh Dutta. "Leveraging Symmetric Relations for Approximation Coalition Structure Generation". In: *PRIMA 2019: The 22nd International Conference on Principles and Practice of Multi-Agent Systems.* 2019.

[35] Amit Paul and Animesh Dutta. "Duplicate Removal for Overlapping Clusters: A Study Using Social Media Data". In: *AAAI 2019 Spring Symposium on Combining Machine Learning with Knowledge Engineering (AAAI-MAKE).* 2019.

[36] Amrita Namtirtha, Animesh Dutta, and Biswanath Dutta. "Weighted kshell degree neighborhood method: An approach independent of completeness of global network structure for identifying the influential spreaders". In: *Communication Systems & Networks (COMSNETS), 2018 10th International Conference on.* IEEE. 2018, pp. 81–88.

[37] Samriddhi Sarkar et al. "Coalition Structure Formation using Parallel Dynamic Programming". In: *Proceedings of the 10th International Conference on Agents and Artificial Intelligence - Volume 2: ICAART,* INSTICC. SciTePress, 2018, pp. 103–110. DOI: 10.5220/0006587401030110.

[38] S. Sen et al. "Developing a Metadata Application Profile for the Daily Hire Labor". In: *Proceedings of International Conference on Dublin Core & Metadata Applications.* 2018.

[39] Krishnendu Kundu and Animesh Dutta. "Multi-agent based Synchronous Communication for Dynamic Rescheduling in Railway Network". In: *Proceedings of the 9th International Conference on Agents and Artificial Intelligence - Volume 1: ICAART,* INSTICC. SciTePress, 2017, pp. 137–144. DOI: 10.5220/0006120901370144.

[40] A. Mazumder et al. "InformalOnt: An ontology to empower the informal sector workforce". In: *TENCON 2017 - 2017 IEEE Region 10 Conference.* Nov. 2017, pp. 2777–2782. DOI: 10.1109/TENCON.2017.8228334.

[41] Amit Biswas and Animesh Dutta. "A Timer Based Leader Election Algorithm". In: *Ubiquitous Intelligence & Computing, Advanced and Trusted Computing, Scalable Computing and Communications, Cloud and Big Data Computing, Internet of People, and Smart World.* IEEE. 2016, pp. 432–439.

[42] Narayan Changder, Animesh Dutta, and Aditya K Ghose. "A Kernelization approach for Anytime Coalition Structure Generation using Knuth Algorithm X". In: (2016).

[43] Narayan Changder, Animesh Dutta, and Aditya K Ghose. "Coalition Structure Formation Using Anytime Dynamic Programming". In: *International Conference on Principles and Practice of Multi-Agent Systems.* Springer. 2016, pp. 295–309.

[44] Amrita Namtirtha et al. "Algorithm for finding influential user: Based on user's information diffusion region". In: *Region 10 Conference (TENCON), 2016 IEEE.* IEEE. 2016, pp. 2734–2738.

[45] Amit Paul, Animesh Dutta, and Frans Coenen. "Cluster of tweet users based on optimal set". In: *Region 10 Conference (TENCON), 2016 IEEE.* IEEE. 2016, pp. 286–290.

[46]   Samriddhi Sarkar and Animesh Dutta. "Petri Net based modelling of railway intersection colli-sion avoidance system". In: *Intelligent Rail Transportation (ICIRT), 2016 IEEE International Conference on.* IEEE. 2016, pp. 356–361.

[47]   Pratik Kumar Sinha and Animesh Dutta. "Multi-satellite task allocation algorithm for Earth observation". In: *Region 10 Conference (TENCON), 2016 IEEE.* IEEE. 2016, pp. 403–408.

[48]   Abhijit Adhikari et al. "A novel information theoretic approach for finding semantic similarity in WordNet". In: *TENCON 2015-2015 IEEE Region 10 Conference.* IEEE. 2015, pp. 1–6.

[49]   Bikash Choudhury, Subhrabrata Choudhury, and Animesh Dutta. "A Multi-agent Based Optimized Service Replication Scheme for SOC in Mobile Ad Hoc Environment". In: *Web Intelligence and Intelligent Agent Technology (WI-IAT), 2015 IEEE/WIC/ACM International Conference on.* Vol. 2. IEEE. 2015, pp. 43–46.

[50]   Poulami Dalapati, Arambam James Singh, and Animesh Dutta. "Multiagent Based Algorithmic Approach for Fast Response in Railway Disaster Handling". In: *Web Intelligence and Intelligent Agent Technology (WI-IAT), 2015 IEEE/WIC/ACM International Conference on.* Vol. 2. IEEE. 2015, pp. 316–319.

[51]   Sangeeta Sen et al. "An analytical approach for query optimization based on hypergraph". In: *Electrical Engineering/Electronics, Computer, Telecommunications and Information Technology (ECTI-CON), 2015 12th International Conference on.* IEEE. 2015, pp. 1–6.

[52]   Sangeeta Sen et al. "Hypergraph based query optimization". In: *Computer Communication and Informatics (ICCCI), 2015 International Conference on.* IEEE. 2015, pp. 1–8.

[53]   Bikash Choudhury et al. "A multi-agent based optimised server selection scheme for soc in pervasive environment". In: *International Conference on Practical Applications of Agents and Multi-Agent Systems.* Springer. 2014, pp. 50–61.

[54]   Poulami Dalapati et al. "Multi agent based railway scheduling and optimization". In: *TENCON 2014-2014 IEEE Region 10 Conference.* IEEE. 2014, pp. 1–6.

[55]   Ankit Bhardwaj, Supriyo Ghosh, and Animesh Dutta. "Modeling of multiagent based railway system using BDI logic". In: *International Conference on Future Trends in Computing and Communication.* 2013.

[56]   Animesh Dutta et al. "Virtual Medical Board: A distributed Bayesian agent based approach". In: *Proceedings of the Twenty Fifth International Conference on Software Engineering & Knowledge Engineering.* Knowledge Systems Institute. 2013, pp. 685–689.

[57]   Supriyo Ghosh, Animesh Dutta, and MdAlamgir Alam. "Multi-agent based railway track management system". In: *Advance Computing Conference (IACC), 2013 IEEE 3rd International.* IEEE. 2013, pp. 1408–1413.

[58]   Supriyo Ghosh et al. "Exploiting MAS-Based Simulation to Improve the Indian Railways' Efficiency". In: *German Conference on Multiagent System Technologies.* Springer. 2013, pp. 278–291.

[59]   Arambam James Singh, Sudipta Acharya, and Animesh Dutta. "Agent based task specific team formation for effective distributed decision making". In: *Electrical Engineering/Electronics, Computer, Telecommunications and Information Technology (ECTI-CON), 2013 10th International Conference on.* IEEE. 2013, pp. 1–6.

[60]   Sudipta Acharya and Animesh Dutta. "Coordination ontology for multi agent based distributed decision making". In: *Parallel Distributed and Grid Computing (PDGC), 2012 2nd IEEE International Conference on.* IEEE. 2012, pp. 508–514.

[61] Sudipta Acharya, Prajna Devi Upadhyay, and Animesh Dutta. "Automated Software Development Methodology: An agent oriented approach". In: *(Information Technology Journal)* 8.2 (2012), pp. 88–95.

[62] Sudipta Acharya, Prajna Devi Upadhyay, and Animesh Dutta. "Fault Tolerance Multi Agent coordination: A petri net based approach". In: *IJCA Proceedings on International Conference on Recent Advances and Future Trends in Information Technology (iRAFIT 2012)*. 3. Foundation of Computer Science (FCS). 2012, pp. 15–20.

[63] Navin Agarwal and Animesh Dutta. "Agent Based Computing Environment for Accessing Previleged Servics". In: *King Mongkut's University of Technology North Bangkok International Journal of Applied Science and Technology* 5.3 (2012), pp. 27–32.

[64] Animesh Dutta, Prajna Devi Upadhyay, and Sudipta Acharya. "Requirement Analysis and Automated Verification". In: SEKE. Knowledge Systems Institute Graduate School, 2012, pp. 51–54.

[65] Supriyo Ghosh and Animesh Dutta. "Ontology Driven Conceptual Graph Representation of Natural Language". In: *8th International Conference on Computing and Information Technology (IC2IT), Pattaya, Thailand.* Jan. 2012.

[66] Sreeja Golui et al. "An Ontology Driven E-counseling System As An Implementation of Semantic Web Technology". In: *International Conference on Intelligent Systems (ICIS'2012) Penang (Malaysia).* 2012.

[67] Shrutilipi Bhattacharjee and Animesh Dutta. "QoS adaptation in distributed multimedia based collaborative environment". In: *Modeling, Simulation and Applied Optimization (ICMSAO), 2011 4th International Conference on.* IEEE. 2011, pp. 1–7.

[68] Koninika Pal, Prajna Devi Upadhyay, and Animesh Datta. "A Petri Net Based Model for Multipoint Multistream Synchronization in Multimedia Conferencing". In: *Security-Enriched Urban Computing and Smart Grid.* Springer, 2011, pp. 64–73.

[69] Koninika Pal, Prajna Devi Upadhyay, and Animesh Dutta. "A petri nets based model for multipoint synchronization in audio conferencing". In: *Communication Systems and Networks (COM-SNETS), 2011 Third International Conference on.* IEEE. 2011, pp. 1–8.

[70] Shrutilipi Bhattacharjee, Imon Banerjee, and Animesh Datta. "An Ontology Based Framework for Domain Analysis of Interactive System". In: *International Conference on Contemporary Computing.* Springer. 2010, pp. 391–402.

[71] Animesh Datta et al. "Framework for Domain Analysis of Teleteaching System: A Semiformal Approach." In: *Software Engineering Research and Practice.* 2010, pp. 92–98.

[72] Animesh Dutta, Shrutilipi Bhattacharjee, and Imon Banerjee. "Formal Design of Teleteaching Interactivity". In: *Recent Trends in Information, Telecommunication and Computing (ITC), 2010 International Conference on.* IEEE. 2010, pp. 179–183.

[73] Animesh Dutta et al. "Ontology based semiformal design of teleteaching system". In: *TENCON 2010-2010 IEEE Region 10 Conference.* IEEE. 2010, pp. 1053–1058.

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Journal

[1] Nilanjana Saha and Animesh Dutta. "WCM-GCN: Identifying Influential Spreaders Using Graph Convolutional Networks on Weighted Directed Networks Based on Spreading Properties". In: *Journal of Knowledge and Information Systems* 68.1 (2026), p. 33.

[2] Tuhin Kumar Biswas et al. "Compact agent neighborhood search for the SCSGA-MF-TS: SCSGA with multi-dimensional features prioritizing task satisfaction". In: *Information Sciences* 706 (2025), p. 122021.

[3] Suman Nandi, Giridhar Maji, and Animesh Dutta. "Identifying vital spreaders in multiplex networks: measurement of layer dominance and a closeness-based layer gravity method: S. Nandi et al." In: *The Journal of Supercomputing* 81.13 (2025), p. 1253.

[4] Suman Nandi et al. "Community-based voting approach to enhance the spreading dynamics by identifying a group of influential spreaders in complex networks". In: *Journal of Computational Science* (2025), p. 102540.

[5] Amit Paul, Narayan Changder, and Animesh Dutta. "DSF-GAM: a location inference model in social network Twitter". In: *International Journal of Computers and Applications* (2025), pp. 1–21.

[6] S. Sadhu et al. "PathSAGE: Identifying Influential Spreaders in Temporal Networks with GraphSAGE". In: *IEEE Transactions on Emerging Topics in Computational Intelligence* (2025). Accepted for publication, to appear.

[7] Nilanjana Saha, Amrita Namtirtha, and Animesh Dutta. "Identifying influential spreaders on weighted directed networks based on spreading properties: N. Saha et al." In: *The Journal of Supercomputing* 81.11 (2025), p. 1175.

[8] Suman Nandi et al. "IC-SNI: measuring nodes influential capability in complex networks through structural and neighboring information". In: *Knowledge and Information Systems* (2024), pp. 1–42. DOI: `https://doi.org/10.1007/s10115-024-02262-9`.

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