Soumajit Pramanik

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ACADEMIC DETAILS

Examination/ Degree	Department	Institute (University/Board)	Advisor	Year	Percentage/ Grade
Ph.D.	CSE	Indian Institute of Technology, Kharagpur	Dr. Bivas Mitra	2019	NA
M.Tech.	CS	Indian Statistical Institute, Kolkata	Dr. Mandar Mitra	2013	88.67%
B.Tech.	CSE	St. Thomas' College of Engg. & Tech., Kolkata (WBUT)	Amiya Halder	2011	9.23 (DGPA)
Higher Secondary (10+2)	Science	Hindu School, Kolkata (WBCHSE)	NA	2007	83.00%
Secondary (10)	NA	Hare School, Kolkata (WBBSE)	NA	2005	89.38%

EXPERIENCE

- Working as an 'Assistant Professor' at the Department of Computer Science and Engineering (CSE) at Indian Institute of Technology Bhilai, Chattisgarh, India since August' 2020 till date (also an adjunct faculty at the Mechatronics department since December' 2021 till date).

- Worked as a 'Post Doctoral Researcher', under Professor Gerhard Weikum, from July' 2019 - July'2020, at the Department D5 (Database and Information Systems) of the Max Planck Institute for Informatics (MPII), Saarbrücken, Germany.

- Worked as a 'Visiting Scholar', under Professor Gerhard Weikum, from November' 2018 - June'2019, at the Department D5 (Database and Information Systems) of the Max Planck Institute for Informatics (MPII), Saarbrücken, Germany.

FIELDS OF INTEREST

- Machine Learning (Deep Neural Networks, Graph Neural Networks, Computer Vision)

- Natural Language Processing & Information Retrieval (Question-Answering, Knowledge Graphs, Large Language Models)

- Complex Networks (Social Networks, Multilayer Networks)

PUBLICATIONS

- **Selected Journals**

  - **Soumajit Pramanik**, Prishni Rateria, Raphael Tackx, Mayank Shukla, Jean-Loup Guillaume, and Bivas Mitra, *"Multilayer Louvain: A Modularity based Community Detection Algorithm for Multilayer Networks"*, Knowledge and Information Systems (KAIS), Springer, 2025

  - Somnath Mondal, Debarghya Datta, **Soumajit Pramanik**, Rukmankesh Mehra, *"UniGEN-DDI: Computing drug-drug interactions using a unified graph embedding network"*, IEEE Transactions on Computational Biology and Bioinformatics (TCBB), 2025

  - **Soumajit Pramanik**, Jesujoba Alabi, Rishiraj Saha Roy, and Gerhard Weikum, *"UNIQORN: Unified Question Answering over RDF Knowledge Graphs and Natural Language Text"*, Journal of Web Semantics, Elsevier, September 2024, DOI: 10.1016/j.websem.2024.100833.

- Tyll Krueger, Bivas Mitra, Tomasz Ozanski, and **Soumajit Pramanik**, *"Epidemic Spreading on Directed Networks and Twitter Cascades"*, IEEE Transactions on Network Science and Engineering (**TNSE**), IEEE, January, 2024, DOI: 10.1109/TNSE.2023.3348474.

- **Soumajit Pramanik**, Rajarshi Haldar, Anand Kumar, Sayan Pathak and Bivas Mitra, *"Deep Learning driven Venue Recommender for Event-based Social Networks"*, IEEE Transactions on Knowledge and Data Engineering (**TKDE**), IEEE, May, 2019, DOI: 10.1109/TKDE.2019.2915523.

- **Soumajit Pramanik**, Mohit Sharma, Maximilien Danisch, Qinna Wang, Jean-Loup Guillaume and Bivas Mitra, *"Easy-Mention: A Model driven Mention Recommendation Heuristic to Boost your Tweet Popularity"*, International Journal of Data Science and Analytics (**JDSA**), Volume 7, pages 131 – 147, Springer, March, 2018.

- **Soumajit Pramanik**, Qinna Wang, Maximilien Danisch, Jean-Loup Guillaume, Bivas Mitra, *"Modeling Cascade Formation in Twitter amidst Mentions and Retweets"*, Journal of Social Network Analysis and Mining (**SNAM**), Volume 7:41, Springer, August, 2017.

- Mayank Singh, **Soumajit Pramanik** and Tanmoy Chakraborty, *"PubIndia: A Framework for Analyzing Indian Research Publications in Computer Science"*, **D-Lib Magazine**, Volume 21, Number 11/12, November/December 2015.

- Amiya Halder and **Soumajit Pramanik**, *"An Unsupervised Dynamic Image Segmentation using Fuzzy Hopfield Neural Network based Genetic Algorithm"*, International Journal of Computer Sciences Issues (**IJCSI**) Vol 9, Issue 2, No 2, March, 2012.

- Amiya Halder, **Soumajit Pramanik** and Arindam Kar, *"Dynamic Image Segmentation using Fuzzy C-Means based Genetic Algorithm"*, International Journal of Computer Applications (**IJCA**) (0975 –8887) Volume 28– No.6, August, 2011.

- **Selected Conferences**

  - Harshit Kumar Sahu, Pritika Marik, Amit Ruidas, Chiranjib Ghosh, **Soumajit Pramanik**, Avishek Adhikary, *"Autonomous CO2 Source Detection with UAVs Using Reinforcement Learning"*, IEEE ETAAV – International Conference on Emerging Technology in Autonomous Aerial Vehicles, Bangalore, 2025.

  - Harshit Kumar Sahu, Pritika Marik, Amit Ruidas, Chiranjib Ghosh, **Soumajit Pramanik**, Avishek Adhikary, *"Feed Forward Neural Network Based Automated Gas Source Localization Using UAV: a Case Study on CO2 Source Tracking"*, IEEE Sensors Conference, Vancouver, Canada, 2025.

  - Aashish, Parul Diwakar, Venkata Narendra Kotyada, Rishi Ranjan Singh, and **Soumajit Pramanik**, *"Deep Learning Based Link Prediction for Minimizing Maximum Betweenness"*, The 13th International Conference on Complex Networks and Their Applications (**Complex Networks**), 2024, Istanbul, Turkey, December 10-12.

  - Debarghya Datta, and **Soumajit Pramanik**, *"Unsupervised Named Entity Disambiguation for Low Resource Domains"*, The 2024 Conference on Empirical Methods in Natural Language Processing (**EMNLP**), 2025, Miami, US, November 12-16.

  - Gagan Raj Gupta, **Soumajit Pramanik**, Milind Thummala, and Anirban Haldar, *"Improved Representations using Augmented Graphs"*, The 7th International Conference on Data Science and Management of Data (**CODS-COMAD**), 2024, Bangalore, India, January 4-7.

  - Zhen Jia, **Soumajit Pramanik**, Rishiraj Saha Roy, and Gerhard Weikum, *"Complex Temporal Question Answering on Knowledge Graphs"*, 30th ACM International Conference on Information and Knowledge Management (**CIKM**), 2021, November 1-5 (held virtually).

  - Azin Ghazimatin, **Soumajit Pramanik**, Rishiraj Saha Roy, and Gerhard Weikum, *"ELIXIR: Learning from User Feedback on Explanations to Improve Recommender Models"*, The Web Conference (**WWW**), 2021, April 19-23 (held virtually).

  - Ayan Kumar Bhowmick, **Soumajit Pramanik**, Sayan Pathak, Bivas Mitra, *"On the Role of Microcategories to Characterize Event Popularity in Meetup"*, The 15th International AAAI Conference On Web And Social Media (**ICWSM**) 2021 (held virtually).

  - Ayan Kumar Bhowmick, **Soumajit Pramanik**, Sayan Pathak, Bivas Mitra, *"On the Splitting Dynamics of Meetup Social Groups"*, The 14th International AAAI Conference On Web And Social Media (**ICWSM**) 2020 (held virtually).

- Xiaolu Lu, **Soumajit Pramanik**, Rishiraj Saha Roy, Abdalghani Abujabal, Yafang Wang and Gerhard Weikum, *"Answering Complex Questions by Joining Multi-Document Evidence with Quasi Knowledge Graphs"*, The 42nd International ACM SIGIR Conference on Research and Development in Information Retrieval (**SIGIR**), 2019, Paris, France, July 21-25.

- **Soumajit Pramanik**, Surya Teja Gora, Ravi Sundaram, Niloy Ganguly and Bivas Mitra, *"On the Migration of Researchers across Scientific Domains"*, The 13th International AAAI Conference On Web And Social Media (**ICWSM**) 2019, Munich, Germany, June 11-14.

- **Soumajit Pramanik**, Raphael Tackx, Anchit Navelkar, Jean-Loup Guillaume and Bivas Mitra, *"Discovering Community Structure in Multilayer Networks"*, The 4th IEEE International Conference on Data Science and Advanced Analytics (**DSAA**) 2017, Tokyo, Japan, October 19-21.

- **Soumajit Pramanik**, Raphael Tackx, Anchit Navelkar, Jean-Loup Guillaume and Bivas Mitra, *"Structure communautaire des réseaux multicouches"*, Huitième conférence Modèles et Analyses Réseau : Approches Mathématiques et Informatique (**MARAMI**) 2017, La Rochelle, France, October 18-20.

- **Soumajit Pramanik**, Maximilien Danisch, Qinna Wang, Sumanth Bandi, Anand Kumar, Jean-Loup Guillaume and Bivas Mitra, *"On the Role of Mentions on Tweet Virality"*, The 3rd IEEE International Conference on Data Science and Advanced Analytics (**DSAA**) 2016, Montreal, Canada, October 17-19.

- **Soumajit Pramanik**, Midhun Gundapuneni, Sayan Pathak and Bivas Mitra, *"Can I Foresee the Success of My Meetup group?"*, The 2016 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining (**ASONAM**) 2016, San Francisco, CA, USA, August 18-21.

- **Soumajit Pramanik**, Midhun Gundapuneni, Sayan Pathak and Bivas Mitra, *"Predicting Group- Success in Meetup: Does Temporal Signal Help?"*, The 10th International AAAI Conference On Web And Social Media (**ICWSM**) 2016, Cologne, Germany, May 17-20.

- **Soumajit Pramanik**, Qinna Wang, Maximilien Danisch, Bivas Mitra and Jean-Loup Guillaume, *"Augmenter les Retweets sur Twitter : Comment Tirer Parti des Mentions?"*, Modèles et Analyse des Réseaux: Approches Mathématiques et Informatiques (**MARAMI**) 2015, Nimes, France, October 14-16.

- **Soumajit Pramanik**, Pranay Hasan Yerra and Bivas Mitra, *"Whom-to-Interact: Does Conference Networking Boost Your Citation Count?"*, The 2nd IKDD Conference on Data Sciences (**CoDS**), 2015, Bangalore, India, March 18-21.

- Amiya Halder, **Soumajit Pramanik** and Arindam Kar, *"Histogram based Evolutionary Dynamic Image Segmentation"*, The 4th International Conference on Electronics Computer Technology (**ICECT**) 2012, IEEE Xplore, Kanyakumari, India, April 6-8.

- Amiya Halder, **Soumajit Pramanik**, Swastik Pal, Nilabha Chatterjee and Arindam Kar, *"Edge Detection: A Statistical Approach"*, The 3rd International Conference on Electronics Computer Technology (**ICECT**) 2011, Kanyakumari, India, April 8-10.

- Amiya Halder, **Soumajit Pramanik**, Swastik Pal, Nilabha Chatterjee and Arindam Kar, *"Modal and Mutational Agglomeration based Automatic Color Image Segmentation"*, International Conference on Machine Vision (**ICMV**) 2010, Hong Kong, China, December 28 - 30.

- **Posters**

  - Mayank Singh, **Soumajit Pramanik** and Tanmoy Chakraborty, *"PubIndia: A Framework for Analyzing Indian Research Publications in Computer Science"*, The 4th International Workshop on Mining Scientific Publications (**WOSP**), held in conjunction with **JCDL** 2015, Knoxville, Tennessee, USA, June 21-25. (**Presentation**)

  - **Soumajit Pramanik**, Maximilien Danisch, Qinna Wang, Jean-Loup Guillaume and Bivas Mitra, *"Analyzing the Impact of Mentioning in Twitter"*, International School and Conference on Network Science (**NetSci**) 2015, Zaragoza, Spain, June 1-5.

  - **Soumajit Pramanik**, Pranay Hasan Yerra and Bivas Mitra, *"Analyzing the Impact of Interactions on Information Flow in Citation Network"*, International School and Conference on Network Science (**NetSci**) 2015, Zaragoza, Spain, June 1-5.

  - **Soumajit Pramanik**, Maximilien Danisch, Qinna Wang, Jean-Loup Guillaume and Bivas Mitra, *"Analyzing the Impact of Mentioning in Twitter"*, Network of Networks (**NetONets**) Satellite Workshop, International School and Conference on Network Science (**NetSci**) 2015, Zaragoza, Spain, June 1-5. (**Presentation**)

- **Soumajit Pramanik**, Payal Priyadarshini, Sayan Pathak and Bivas mitra, *"Analyzing the Interplay between Online and Offline Communication: A Case Study on Meetup"*, Physics of Multilayered Interconnected Networks (**PhyMultiNet**) Satellite Workshop, International School and Conference on Network Science (**NetSci**) 2015, Zaragoza, Spain, June 1-5. (**Presentation**)

- **Soumajit Pramanik**, Maximilien Danisch, Qinna Wang and Bivas Mitra, *"An Empirical Approach towards an Efficient 'Whom to Mention?' Twitter app"*, Twitter for Research, 1st International & Interdisciplinary Conference 2015, Lyon, France, April 24. (**Presentation**)

- **Soumajit Pramanik** and Bivas Mitra, *"Analyzing the Importance of Socialization on the Evolution of Scientific Citations and Collaborations: A Multiplex Network Approach"*, Multiplex Networks 2014: Towards the understanding of a complex world (**MULTIPLEX**), Satellite Workshop of European Conference on Complex Systems (**ECCS**) 2014, Lucca, Italy, September 24. (**Presentation**)

- **Soumajit Pramanik**, Ayan Das and Bivas Mitra, *"Multi-Layer Information Spread in Online Social Networks"*, Dynamics On and Of Complex Networks (**DOOCN**) VII, Satellite Workshop of European Conference on Complex Systems (**ECCS**) 2014, Lucca, Italy, September 24. (**Presentation**)

- **Soumajit Pramanik**, Ayan Das and Bivas Mitra, *"Information Spread on Twitter: Does Mention Help?"*, Computational Social Science (**CSS**), Satellite Workshop of European Conference on Complex Systems (**ECCS**) 2014, Lucca, Italy, September 24-25. (**Presentation**)

- **Soumajit Pramanik** and Bivas Mitra, *"Influence of Interactions on the Evolution of Scientific Citations and Collaborations: A Multiplex Network Approach"*, European Conference on Complex Systems (**ECCS**) 2014, Lucca, Italy, September 22-26.

- **Soumajit Pramanik** and Bivas Mitra, *"Influence of Interaction Events on the Evolution of Scientific Citations and Collaborations"*, Doctoral Symposium, the 8th ACM International Conference on Distributed Event-Based Systems (**DEBS**) 2014, Mumbai, India, May 26-29. (**Presentation**)

- **Soumajit Pramanik** and Bivas Mitra, *"Influence of Interactions on the Evolving Citation Network"*, Xerox Research Centre India (**XRCI**) Open 2014, Bangalore, India, March 14.

- **Workshops & Doctoral Symposiums**

  - Mayank Singh, **Soumajit Pramanik** and Tanmoy Chakraborty, *"PubIndia: A Framework for Analyzing Indian Research Publications in Computer Science"*, The 4th International Workshop on Mining Scientific Publications (**WOSP**), held in conjunction with **JCDL** 2015, Knoxville, Tennessee, USA, June 21-25.

  - **Soumajit Pramanik**, Maximilien Danisch, Qinna Wang, Jean-Loup Guillaume and Bivas Mitra, *"Analyzing the Impact of Mentioning in Twitter"*, International School and Conference on Network Science (**NetSci**) 2015, Zaragoza, Spain, June 1-5. (**Poster**)

  - **Soumajit Pramanik**, Pranay Hasan Yerra and Bivas Mitra, *"Analyzing the Impact of Interactions on Information Flow in Citation Network"*, International School and Conference on Network Science (**NetSci**) 2015, Zaragoza, Spain, June 1-5. (**Poster**)

  - **Soumajit Pramanik**, Maximilien Danisch, Qinna Wang, Jean-Loup Guillaume and Bivas Mitra, *"Analyzing the Impact of Mentioning in Twitter"*, Network of Networks (**NetONets**) Satellite Workshop, International School and Conference on Network Science (**NetSci**) 2015, Zaragoza, Spain, June 1-5.

  - **Soumajit Pramanik**, Payal Priyadarshini, Sayan Pathak and Bivas mitra, *"Analyzing the Interplay between Online and Offline Communication: A Case Study on Meetup"*, Physics of Multilayered Interconnected Networks (**PhyMultiNet**) Satellite Workshop, International School and Conference on Network Science (**NetSci**) 2015, Zaragoza, Spain, June 1-5.

  - **Soumajit Pramanik**, Maximilien Danisch, Qinna Wang and Bivas Mitra, *"An Empirical Approach towards an Efficient 'Whom to Mention?' Twitter app"*, Twitter for Research, 1st International & Interdisciplinary Conference 2015, Lyon, France, April 24.

  - **Soumajit Pramanik** and Bivas Mitra, *"Analyzing the Importance of Socialization on the Evolution of Scientific Citations and Collaborations: A Multiplex Network Approach"*, Multiplex Networks 2014: Towards the understanding of a complex world (**MULTIPLEX**), Satellite Workshop of European Conference on Complex Systems (**ECCS**) 2014, Lucca, Italy, September 24.

  - **Soumajit Pramanik**, Ayan Das and Bivas Mitra, *"Multi-Layer Information Spread in Online Social Networks"*, Dynamics On and Of Complex Networks (**DOOCN**) VII, Satellite Workshop of European Conference on Complex Systems (**ECCS**) 2014, Lucca, Italy, September 24.

- Soumajit Pramanik, Ayan Das and Bivas Mitra, *"Information Spread on Twitter: Does Mention Help?"*, Computational Social Science (**CSS**), Satellite Workshop of European Conference on Complex Systems (**ECCS**) 2014, Lucca, Italy, September 24-25.

- Soumajit Pramanik and Bivas Mitra, *"Influence of Interactions on the Evolution of Scientific Citations and Collaborations: A Multiplex Network Approach"*, European Conference on Complex Systems (**ECCS**) 2014, Lucca, Italy, September 22-26. (**Poster**)

- Soumajit Pramanik and Bivas Mitra, *"Influence of Interaction Events on the Evolution of Scientific Citations and Collaborations"*, Doctoral Symposium, the 8th ACM International Conference on Distributed Event-Based Systems (**DEBS**) 2014, Mumbai, India, May 26-29.

- Soumajit Pramanik and Bivas Mitra, *"Influence of Interactions on the Evolving Citation Network"*, Xerox Research Centre India (**XRCI**) Open 2014, Bangalore, India, March 14. (**Poster**)

MAJOR PROJECTS

- **Project funded by Ministry of Electronics and Information Technology (MeitY) at Indian Institute of Technology Bhilai (September'2022 - September'2027)**

  - **Title:** "Capacity building for Human Resource Development in Unmanned Aircraft System (Drone and related Technology)"
  - **Objective:** The primary objective of the programme is to leverage collaborative activities in human resource development through capacity building in education and training in the area of Unmanned Aircraft System (UAS). The programme is conceived to achieve the following broad objectives: (a) To enhance the capacity and capabilities of the selected institutions in identified Work Themes (WTs) on Unmanned Aircraft Systems, (b) To foster development of competent human resources at various levels including Post Graduate & Graduate programs, PG Diploma/Certificate programs, Faculty Updation and Master Trainers in niche areas of UAS and (c) To nurture technical talent and ideation among the student community through IPR generation, Funding start-ups, Competitions, Bootcamps, Workshops / Conferences, etc.
  - **Principal Investigator (PI):** Dr. Avishek Adhikary, Assistant Professor, Department of Computer Science and Engineering (CSE), Indian Institute of Technology Bhilai
  - **Co-Principal Investigator (Co-PI):** Dr. Soumajit Pramanik, Assistant Professor, Department of Computer Science and Engineering (CSE), Indian Institute of Technology Bhilai.

- **Project funded by Ministry of Electronics and Information Technology (MeitY) at Indian Institute of Technology Bhilai (March'2021 - March'2025)**

  - **Title:** "AI-on-Edge: AI-based edge analytics framework for real time disaster management"
  - **Problem Statement:** As we know, disaster affected areas are hard to access and it requires huge manpower and time to handle and monitor the situation. In such scenarios, Unmanned Aerial Vehicles (UAV) also known as drones, can prove to be very helpful in providing real-time responses to the ground team. In this project, our goal is to develop a novel edge computing based platform for real-time identification of survivors within the region of spread of the disaster as well as the damages caused by disaster, from images captured by drones.
  - **Principal Investigator (PI):** Dr. Soumajit Pramanik, Assistant Professor, Department of Computer Science and Engineering (CSE), Indian Institute of Technology Bhilai.
  - **Co-Principal Investigator (Co-PI):** Dr. Subhajit Sidhanta, Assistant Professor; Prof. Santosh Biswas, Professor and Prof. Rajat Moona, Professor, Department of Computer Science and Engineering (CSE), Indian Institute of Technology Gandhinagar.

- **Postdoctoral Work, Max Planck Institute for Informatics (MPII), Saarbrücken, Germany, (July'2019 - July'2020)**

  - **Title:** "Advanced Question Answering over Knowledge Graphs and Text Corpora"
  - **Problem Statement:** Direct answering of questions that involve multiple entities and relations is a challenge for text-based QA. This problem is most pronounced when answers can be found only by joining evidence from multiple documents. Curated knowledge graphs (KGs) may yield good answers, but are limited by their inherent incompleteness and potential staleness. In this work, the objective was to develop a method that can answer complex questions directly from textual sources on-the-fly, by computing similarity joins over partial results from different documents.

- **Advisors:** Prof. Gerhard Weikum, Scientific Director and Dr. Rishiraj Saha Roy, Senior Researcher at the Department D5 of Max Planck Institute for Informatics (MPII), Saarbrücken.

- **Ph.D. Thesis, Indian Institute of Technology Kharagpur (July'2013 - October'2018)**

  - **Title:** "Analyzing the Structure and Dynamics of Multilayer Networks: An Application Centric Study"
  - **Problem Statement:** The four key problems dealt with in this thesis are the following - (a) detecting communities in multilayer networks, (b) proposing an information diffusion model for multilayer networks, (c) analyzing node movements across the layers of multilayer networks, and (d) developing an entity recommender system for multilayer networks. Overall, the goal of this thesis was to analyze multilayer networks from the perspective of both its structural and functional properties, with the help of state-of-the-art network science and data science techniques.
  - **Advisor:** Dr. Bivas Mitra, Associate Professor, Indian Institute of Technology Kharagpur.

- **M.Tech. Final Year Project, Indian Statistical Institute, Kolkata (August'2012 - July'2013)**

  - **Title:** "Understanding the Performance of Expanded Queries"
  - **Problem Statement:** The relative performances of standard Query Expansion algorithms (KLD, RBLM, DFR etc.) vary over different input queries. Also there are queries for which performance does not improve, or even worsens, when it is expanded. The aim of this project was understanding the reason as to why some query expansion algorithms perform better than other query expansion algorithms for a given query.
  - **Advisor:** Dr. Mandar Mitra, Professor, Indian Statistical Institute, Kolkata.

- **Industrial Project, Infosys Limited, Bangalore (Summer Internship May'2012 - July'2012)**

  - **Title:** "Intelligent Handwritten and Printed Character Recognition using Image Processing & Machine Learning".
  - **Problem Statement:** To detect printed and handwritten alphanumeric characters accurately by building intelligent algorithms using machine learning and image processing. Value Propositions: (a) Automatic data entry from manually filled-in documents such as application forms, checks, sales receipts, mails, or printed records, (b) Digitization of manuscripts and publications so that they can be electronically searched, stored more compactly, rendered on-line, and used in machine processing such as machine translation, text-to-speech etc.
  - **Advisor:** Santanu Saha, Infosys Limited, Bangalore.

- **B.Tech. Final Year Project, St. Thomas' College of Engineering & Technology, Kolkata (August'2010 - May'2011)**

  - **Title:** "Image Segmentation Using Edge Detection"
  - **Problem Statement:** The aim of this project was to try to devise an efficient algorithm for image segmentation with the help of Edge detection which should yield higher levels of segmentation for images of various formats, and also analyze the performance of various segmentation algorithms mathematically.
  - **Advisor:** Amiya Halder, Assistant Professor, St. Thomas' College of Engineering & Technology, Kolkata.

ACADEMIC COLLABORATIONS

- Dr. Rishiraj Saha Roy, Researcher, Fraunhofer IIS, Erlangen, Bavaria, Germany.

- Prof. Jean-Loup Guillaume, Professor, L3i, University of La Rochelle, La Rochelle, France.

- Dr. Bivas Mitra, Associate Professor, Department of Computer Science and Engineering, Indian Institute of Technology Kharagpur, India.

- Dr. Rajesh Sharma, Professor, Department of Computer Science and AI, Plaksha University.

- Dr. Nirnay Ghosh, Assistant Professor, Department of Computer Science and Technology (CST), Indian Institute of Engineering Science and Technology (IIEST) Shibpur, India.

- Dr. Abhik Jana, Assistant Professor, School of Electrical and Computer Sciences, IIT Bhubaneshwar, India.

- Dr. Prajna Upadhyay, Assistant Professor, Department of Computer Science and Information Systems, Birla Institute of Technology & Science, Pilani Hyderabad Campus, India.

- Dr. Lipika Dey, Professor, Department of Computer Science, Ashoka University, India.

- Dr. Pragya Agarwala, Assistant Professor, Department of Microbiology, AIIMS Raipur, India.

ACADEMIC AWARDS/ACHIEVEMENTS

- Awarded **'SAP Labs India Doctoral Fellowship'** (July'2014 - June'2017).

- Awarded **'Best Poster'** at the (**XRCI**) Open (Xerox India's 1st Open Innovation symposium) 2014, held in Bangalore, India.

- Awarded Travel grants to attend **CODS'2015** (from conference organizers), **ICWSM'2016** (from conference organizers), **ASONAM'2016** (from Microsoft Corporation), **DSAA'2017** (from IEEE CIS), **ICWSM'2019** (from conference organizers).

- Qualified **UGC-NET** for eligibility for lectureship held in December'2012.

- Stood 2nd in M.Tech. Computer Science, 2011 - 2013 batch at Indian Statistical Institute, Kolkata.

- Joint winner of the **'Best Student Project Award'** (sponsored by TCS) at Indian Statistical Institute, Kolkata (M.Tech. Computer Science, 2011 - 2013 batch).

- Stood 209th in **GATE** (Graduate Aptitude Test in Engineering) 2011, conducted by IIT Madras.

PROFESSIONAL ACTIVITIES

- Served as Program Committee member for CODS-COMAD, 2023.

- Participated and gave a talk in SERB sponsored High-end workshop on "Natural Language Processing with Deep Learning: Application and Research Directions" hosted by Atal Bihari Vajpayee University Bilaspur in July, 2022.

- Participated and gave a talk in the workshop of "Data science Using Python" hosted by Rajiv Gandhi National Institute of Youth Development (RGNIYD), Tamilnadu in February, 2022.

- Organized workshop on 'Dynamics on and of Complex Networks (DOOCN) XIII' held online in September'2020 (co-located with International School and Conference on Network Science (NetSci) 2020).

- Organized workshop on Complex and Social Networks at IIT Kharagpur, March'2017 as student volunteer.

- Organized workshop on 'Dynamics on and of Complex Networks (DOOCN) VIII' held at Zaragoza, Spain in June'2015 (co-located with International School and Conference on Network Science (NetSci) 2015) as student volunteer.

- Organized short-term school and workshop, MLCN (Machine Learning and Complex Network) at IIT Kharagpur, February'2015 as student volunteer.

- Organized workshop on 'Dynamics on and of Complex Networks (DOOCN) VII' held at Lucca, Italy in September'2014 (co-located with European Conference on Complex Systems (ECCS) 2014) as student volunteer.

INTERNSHIPS & VISITS

- Visited LIP6 Lab, Sorbonne University, Paris, France during September'2014 - October'2014, May'2015 - June'2015 and December'2017.

- Visited L3I Lab, University of La Rochelle, La Rochelle, France during June'2016 - July'2016, June'2017 - July'2017, December'2017 and June'2024.

- Visited Microsoft Research Lab, India during May'2015.

- Internship at Infosys Limited, Bangalore, India during May'2012 - July'2012.

TEACHING

- **Advanced Machine Learning:** Dept. of CSE, IIT Bhilai, Winter'2025.

- **Deep Learning for Computer Vision:** Dept. of CSE, IIT Bhilai, Monsoon'2024. (jointly with Dr. Gagan Raj Gupta)

- **Data Analysis and Visualization Lab:** Dept. of CSE, IIT Bhilai, Winter'2023.

- **Natural Language Processing:** Dept. of CSE, IIT Bhilai, Monsoon'2022, Monsoon'2024 and Monsoon'2025.

- **Programming for Data Science and Artificial Intelligence Lab:** Dept. of CSE, IIT Bhilai, Monsoon'2022 and Monsoon'2023.

- **Artificial Intelligence:** Dept. of CSE, IIT Bhilai, Winter'2022, Monsoon'2023, Winter'2024 and Monsoon'2025.

- **Artificial Intelligence and Machine Learning Lab:** Dept. of CSE, IIT Bhilai, Winter'2024, Summer'2025 and Monsoon'2025.

- **Information Retrieval:** Dept. of CSE, IIT Bhilai, Winter'2023, Winter'2022 and Winter'2021.

- **Data Structures:** Dept. of CSE, IIT Bhilai, Monsoon'2021 and Winter'2021

- **Architecture for Management of Large Datasets:** Dept. of CSE, IIT Bhilai, Monsoon'2021. (jointly with Dr. Gagan Raj Gupta and Dr. Subhajit Sidhanta)

- **Introduction to Programming:** Dept. of CSE, IIT Bhilai, Summer'2021 (instructor), Summer' 2022 (tutor).

- **Software Tools & Techniques Lab II:** Dept. of CSE, IIT Bhilai, Monsoon'2020 (jointly with Dr. Dhiman Saha).

THESIS SUPERVISION

- Kartikeya Saraswat, PhD student at Dept. of CSE, IIT Bhilai (Ongoing).

- Khileswar Rajpuriya, PhD student at Dept. of Mechatronics, IIT Bhilai (Ongoing, Joint Supervision).

- Pooja Sarawgi, PhD student at Dept. of CSE, IIT Bhilai (Ongoing, Joint Supervision).

- Gowry Sailaja, PhD student at Dept. of CSE, IIT Bhilai (Ongoing, Joint Supervision).

- Sivananda, PhD student at Dept. of CSE, IIT Bhilai (Ongoing, Joint Supervision).

- Byomkesh Panda, M.Tech. student at Dept. of CSE, IIT Bhilai (Ongoing).

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- **Computing Lab:** Dept. of CSE, IIT Kharagpur, Autumn'2017.

- **Complex Networks:** Dept. of CSE, IIT Kharagpur, Spring'2017.

- **Algorithms Lab:** Dept. of CSE, IIT Kharagpur, Autumn'2016.

- **Operating Systems:** Dept. of CSE, IIT Kharagpur, Spring'2014, Spring'2015 & Spring'2016.

- **Smartphone Computing and Applications:** Dept. of CSE, IIT Kharagpur, Autumn'2014 & Autumn'2015.

- **Programming & Data Structure Lab:** Dept. of CSE, IIT Kharagpur, Autumn'2013.

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