

CONTACT INFORMATION

Department of Computer Science & Engineering
Cooch Behar Government Engineering College
Vill- Harinchawra, P.O.- Ghughumari
Cooch Behar 736 170, India

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RESEARCH INTERESTS

Soft computing, pattern recognition, image processing, optimization

EDUCATION

Indian Institute of Engineering Science & Technology, Shibpur, Howrah, India

PhD., Computer Science & Technology, 2015

- Dissertation Topic: “Multilevel Image Segmentation using Soft Computing Techniques”

West Bengal University of Technology, Kolkata, India

Master of Engineering, Information Technology, 2005

The University Of Burdwan, Burdwan, India

Bachelor of Engineering, Information Technology, 2002

ACADEMIC EXPERIENCE

Cooch Behar Government Engineering College, Department of Computer Science & Engineering, Cooch Behar, INDIA

Associate Professor

April, 2016 - present

Duties include academics, research and supervising research scholars.

University Institute of Technology, Department of Computer Science & Information Technology, University of Burdwan, INDIA

Assistant Professor

January, 2006 - March 2016

Duties include academics and research.

Chandanangar CompuTech Academy, Chandannagar, Hooghly, INDIA

Lecturer

September, 2002 - September 2003

Duties include academics.

INDUSTRIAL EXPERIENCE

Apices Consultancy Services Pvt. Ltd., Kolkata, INDIA

Junior Programmer

January, 2003 - December 2003

Duties include software development.

ADMINISTRATIVE EXPERIENCE

Cooch Behar Government Engineering College, Department of Computer Science & Engineering, Cooch Behar, INDIA

Head of the Department

August, 2016 - present

Successfully leading the department toward academic excellence and exploring opportunities for research/consultancy.

Cooch Behar Government Engineering College, Cooch Behar, INDIA

Coordinator of Procurement & Purchase Committee

December, 2016 - February, 2019

Looking after the overall purchases of the institute.

Cooch Behar Government Engineering College, Cooch Behar, INDIA

Coordinator of Asset Monitoring & Staff Establishment Committee **March, 2018 - present**
Looking after the record keeping of the asset and staff establishment of the institute.

Cooch Behar Government Engineering College, Cooch Behar, INDIA

Academic-in-charge **16th August, 2016 - 02nd November, 2016**
Headed the institute; looked after the academics and administrative affairs.

Cooch Behar Government Engineering College, Cooch Behar, INDIA

Coordinator of Academic Committee **December, 2016 - February, 2018**
Looked after the overall academic activity of the institute.

Cooch Behar Government Engineering College, Cooch Behar, INDIA

Member of Academic Committee **March, 2018 - Present**
Looking after the overall academic activity of the institute.

PEER-REVIEWED
PUBLICATIONS IN
JOURNALS

Rik Das, **Sourav De**, Sudeep Thepade, “Machine Learning in Hybrid Environment for Information Identification with Remotely Sensed Image Data”, *Transactions on Computational Science (TCSC)*, 2019 (Accepted).

Anupam Mukherjee, **Sourav De**, Siddhartha Bhattacharyya, “A Survey on Big Data: An Emerging Imparity and Revolution in Digital World”, *International Journal of Hybrid Intelligence (IJHI)*, 2018 (In Press).

Sourav De, Siddhartha Bhattacharyya and Paramartha Dutta, “Automatic Magnetic Resonance Image Segmentation by Fuzzy Intercluster Hostility Index Based Genetic Algorithm: An Application”, *Applied Soft Computing*, vol. 47, pp. 669-683, 2016.

Sourav De, Siddhartha Bhattacharyya and Susanta Chakraborty, “Color image segmentation using parallel OptiMUSIG activation function”, *Applied Soft Computing*, vol. 12, no. 10, pp. 3228 - 3236, 2012.

Sourav De, Siddhartha Bhattacharyya and Paramartha Dutta, “Efficient grey-level image segmentation using an optimised MUSIG (OptiMUSIG) activation function”, *International Journal of Parallel, Emergent and Distributed Systems*, vol. 26, no. 1, pp. 1-39, 2010.

BOOK CHAPTERS

Sandip Dey, **Sourav De** and Siddhartha Bhattacharyya, “Introduction to Hybrid Meta-heuristic”, *Hybrid Metaheuristics: Research and Applications, World Scientific*, 2018 (Accepted).

Rik Das, **Sourav De** and S. N. Singh (eds. Siddhartha Bhattacharyya, Indrajit Pan, Abhijit Das), “A Study of Recent Trends in Content Based Image Classification”, *Intelligent Multimedia Data Analysis, De Gruyter, Germany*, pp. 65-93, 2018.

Sourav De, Madhumita Singha, Komal Kumari, Ritika Selot and Akshat Gupta (eds. R. Das, S. De and S. Bhattacharyya), “Dimension Reduction using Image Transforms for Content Based Feature dExtraction”, pp. 26 - 40, *Feature Dimension Reduction for Content-Based Image Identification, IGI Global*, 2018.

Sunanda Das, **Sourav De** and Siddhartha Bhattacharyya (eds. S. Bhattacharyya), “True Color

Image Segmentation using Quantum Induced Modified Genetic Algorithm based FCM Algorithm”, pp. 55 - 94, *Quantum-Inspired Intelligent Systems for Multimedia Data Analysis, IGI Global*, 2018.

Sunanda Das, **Sourav De**, Siddhartha Bhattacharyya and Paramartha Dutta (eds. S. Bhattacharyya, I. Pan, A. Mukherjee and P. Dutta), “Multilevel image segmentation using Modified Genetic Algorithm (MfGA) based Fuzzy C-means”, *Hybrid Intelligence for Image Analysis and Understanding, Willy*, 2016.

Sourav De and Firoj Haque (eds. S. Bhattacharyya, H. Bhaumik, S. De and G. Klepac), “Multilevel image segmentation using modified particle swarm optimization”, pp. 106 - 142, *Intelligent Analysis of Multimedia Information, IGI Global*, 2015.

Sourav De, Siddhartha Bhattacharyya and Susanta Chakraborty (eds. S. Bhattacharyya, P. Banerjee, D. Majumdar and P. Dutta), “Multilevel & Color Image Segmentation by NSGA II based OptiMUSIG Activation Function”, pp. 321 - 348, *Handbook of Research on Advanced Hybrid Intelligent Techniques and Applications, IGI Global*, 2015.

Sourav De, and Siddhartha Bhattacharyya (eds. S. Bhattacharyya, P. Dutta and S. Chakraborty), “Color Magnetic Resonance Brain Image Segmentation by ParaOptiMUSIG activation Function: An Application”, vol. 611, pp 185-214, *Hybrid Soft Computing Approaches: Research and Applications, Springer*, 2015. DOI: http://link.springer.com/chapter/10.1007/978-81-322-2544-7_6

Sourav De, Siddhartha Bhattacharyya and Susanta Chakraborty (eds. B. K. Tripathy and D. P. Acharjya), “Efficient Color Image Segmentation by a Parallel Optimized (ParaOptiMUSIG) activation Function”, pp. 19-50, *Global Trends in Intelligent Computing Research and Development, IGI Global*, 2013.

Sourav De, Siddhartha Bhattacharyya and Susanta Chakraborty (eds. S. Bhattacharyya and P. Dutta), “Multilevel Image Segmentation by a Multiobjective Genetic Algorithm Based OptiMUSIG Activation Function”, vol. 1, pp. 122 - 162, *Handbook of Research on Computational Intelligence for Engineering, Science and Business, IGI Global*, 2012.

Sourav De, Siddhartha Bhattacharyya and Paramartha Dutta, (eds. J. Mehnen, M. Koppen, A. Saad and A. Tiwari), “Multilevel Image Segmentation using OptiMUSIG Activation Function with Fixed and Variable Thresholding: A Comparative Study” in *Applications of Soft Computing: From Theory to Praxis, Advances in Intelligent and Soft Computing, Springer- Verlag, Berlin, Heidelberg*, pp. 53-62, 2009.

CONFERENCE
PUBLICATIONS

Rudranath Banerjee, Shouvik Dey and **Sourav De**, “A hybrid multi-layered PCA-Eigenfaces system for facial emotion recognition of persons with Autism”, *International Conference on Emerging Trends in Engineering and Technology (ICETET 2019)*, 2019. (Accepted)

Rik Das, **Sourav De**, Siddhartha Bhattacharyya, Jan Platos, Vaclav Snasel and Aboul Ella Hassanien, “Data Augmentation and Feature Fusion for Melanoma Detection with Content Based Image Classification”, In: Hassanien A., Azar A., Gaber T., Bhatnagar R., F. Tolba M. (eds) *14th International Conference on Advanced Machine Learning Technologies and Applications (AMLTA2019)*, AMLTA 2019, Advances in Intelligent Systems and Computing, vol 921, pp. 712–721, Springer, Cham, 2020.

Sandip Dey, **Sourav De**, Dhrubajyoti Ghosh, Siddhartha Bhattacharyya, Debanjan Konar and Jan Platos, “A Novel Quantum Inspired Sperm Whale Meta-heuristic for Image Thresholding”, *Second International Conference on Advanced Computational and Communication Paradigms (ICACCP 2019)*, 2019. (Accepted)

Anupam Mukherjee, **Sourav De**, Siddhartha Bhattacharyya and Jan Platos, “Chicago Crime Data Analysis Using PIG in Hadoop”, *Fourth IEEE International Conference on Research in Computational Intelligence and Communication Networks (ICRCICN 2018)*, 2018.(Accepted)

Anupam Mukherjee, **Sourav De** and Siddhartha Bhattacharyya, “Indian Crime Data Analysis in Hadoop Framework”, *7th International Conference on Computing, Communication and Sensor Network (CCSN 2018)*, 2018.(Accepted)

Sachin Jadhav, Rik Das, Sudeep Thepade and **Sourav De**, “Applications of Hybrid Machine Learning for Improved Content Based Image Classification”, *4th International Conference On Computing, Communication, Control And Automation*, 2018. (Accepted)

Sunanda Das, **Sourav De**, Siddhartha Bhattacharyya and Aboul Ella Hassanien (2019) “Color MRI Image Segmentation Using Quantum-Inspired Modified Genetic Algorithm-Based FCM”. In: Bhattacharyya S., Mukherjee A., Bhaumik H., Das S., Yoshida K. (eds) *Recent Trends in Signal and Image Processing*. Advances in Intelligent Systems and Computing, vol 727. Springer, Singapore.

Sunanda Das and **Sourav De**, “Multilevel Color Image segmentation using Modified Genetic Algorithm (MfGA) inspired Fuzzy C-Means Clustering”, *Second IEEE International Conference on Research in Computational Intelligence and Communication Networks (ICRCICN 2016)*, pp. 78 - 83, 2016.

Sunanda Das and **Sourav De**, “A Modified Genetic Algorithm based FCM Clustering Algorithm for Magnetic Resonance Image Segmentation”, *Proceedings of the 5th International Conference on Frontiers in Intelligent Computing: Theory and Applications (FICTA)*, vol. 1, pp. 435-443, 2016.

Sourav De, Siddhartha Bhattacharyya and Susanta Chakraborty, “Automatic Data Clustering by Genetic Algorithm Validated by Fuzzy Intercluster Hostility Index,” *2014 Fourth International Conference of Emerging Applications of Information Technology (EAIT2014)*, pp. 58-63, 2014.

Sourav De, Siddhartha Bhattacharyya and Susanta Chakraborty, “Application of Pixel Intensity Based Medical Image Segmentation Using NSGA II Based OptiMUSIG Activation Function,” *2014 International Conference on Computational Intelligence and Communication Networks (CICN2014)*, pp. 262-267, 2014.

Sourav De, Siddhartha Bhattacharyya and Susanta Chakraborty, “Color Image Segmentation by NSGA-II based ParaOptiMUSIG Activation Function”, *2013 International Conference on Machine Intelligence Research and Advancement (ICMIRA-2013)*, pp.105-109, December 21-23, 2013.

Sourav De, Siddhartha Bhattacharyya, Susanta Chakraborty, B. N. Sarkar, P. K. Prabhakar and S. Bose, “Gray Scale Image Segmentation by NSGA-II based OptiMUSIG Activation Function”, *International Conference on Communication Systems and Network Technologies (CSNT 2012)*, pp. 104-108, May 11-13, 2012.

Sourav De, Siddhartha Bhattacharyya and Susanta Chakraborty, ”True Color Image Segmentation by an Optimized Multilevel Activation Function” in Proceedings of 2010 IEEE International Conference on Computational Intelligence and Computing Research (2010 IEEE ICCIC), pp. 545-548, December 28 - 29, 2010.

Sourav De, Siddhartha Bhattacharyya and Susanta Chakraborty ”A Genetic Algorithm based Automatic Image Clustering Technique Validated by Fuzzy Intercluster Hostility Index” in Proceedings of International Conference on Communication, Computers and Devices (ICCCD 2010), December 10-12, 2010.

Sourav De, Siddhartha Bhattacharyya and Paramartha Dutta, "Automatic Clustering by DE Algorithm Validated by Fuzzy Intercluster Hostility Index" in Proceedings of International Conference on Emerging Trends in Computer Science, Communication and Information Technology (CSCIT2010), 2010.

Sourav De, Siddhartha Bhattacharyya and Paramartha Dutta, "A Differential Evolution Algorithm Based Automatic Determination of Optimal Number of Clusters Validated by Fuzzy Intercluster Hostility Index" in Proceedings of First IEEE International Conference on Advanced Computing (ICAC09), pp. 105-111, 2009.

Sourav De, Siddhartha Bhattacharyya and Paramartha Dutta, "Automatic Image Clustering by Genetic Algorithm Validated by Fuzzy Intercluster Hostility Index and Classical DE: A Comparative Study", in Proceedings of National Conference on Ubiquitous Computing (NCUBQT 2009), pp. 12-17, 2009.

Sourav De, Siddhartha Bhattacharyya and Paramartha Dutta, "Optimized Multilevel Image Segmentation: A Comparative Study" in Proceedings of IEEE National Conference on Computing and Communication Systems (CoCoSys-09), pp. 200-205, January 2009.

Sourav De, Siddhartha Bhattacharyya and Paramartha Dutta, "OptiMUSIG : An Optimized Gray Level Image Segmentor" in Proceedings of 16th International Conference on Advanced Computing and Communications (ADCOM 2008), pp 78-87, December 2008.

Sourav De, Siddhartha Bhattacharyya and Paramartha Dutta, "Multilevel Image Segmentation Using Variable Threshold based OptiMUSIG Activation Function", *Proceedings of National Conference on Nanotechnology and its Application in Quantum Computing (NAQC 2008)*, pp 44-51, September 2008.

Sourav De, Preetam De, Siddhartha Bhattacharyya and Paramartha Dutta, "Shape Factor Based Classification and Recognition of Similar Shaped Bangla Printed Consonant Characters", *Proceedings of National Conference on Recent Trends on Intelligent Computing (RTIC 2006)*, pp 101 - 106, November 2006.

PATENT

R. Das, A. Basu, S. Bhattacharyya, **S. De** and N. Dey, "An Image Feature Fusion Hardware System for Faster Convergence of Classification," Patent No. 201831036280 dated 19.10.2018. (Published)

INVITED TALKS

Delivered an invited lecture on "Genetic Algorithm and Multi-objective Genetic Algorithm" in the **Five day TEQIP-II funded National Level FDP on Recent Trends in Research and Research Methodology** organized by the Department of Information Technology, RCC Institute of Information Technology, Kolkata, India on 08th January 2014.

Delivered an invited lecture on "Latex Referencing, Indexing, Hyperlinking and Preparing Bibtex, IDX Files" in the **Five day TEQIP-II sponsored National Level Faculty Development Program on LaTeX: The Art of Technical Writing** organized by the Department of Information Technology, RCC Institute of Information Technology, Kolkata, India on 09th February 2017.

BOOKS AND PERIODICALS

Editor of **Machine Learning for Big Data Analytics**; Publisher: De Gruyter, Germany; Co-editors: Prof. (Dr.) Siddhartha Bhattacharyya, RCC Institute of Information Technology, Kolkata, Dr. Hrishikesh Bhaumik, RCC Institute of Information Technology, Kolkata and Dr. Anirban Mukherjee, RCC Institute of Information Technology, Kolkata, 2018. ISBN 978-3-11-055143-3

Editor of **Intelligent Multidimensional Data and Image Processing**; Publisher: IGI Global, Hershey, USA; Co-editors: Prof. (Dr.) Siddhartha Bhattacharyya, RCC Institute of Information

Technology, Kolkata and Prof. (Dr.) Paramartha Dutta, Visva-Bharati University, Santiniketan, 2018. ISBN13: 9781522552468, ISBN10: 1522552464, EISBN13: 9781522552475, DOI: 10.4018/978-1-5225-5246-8

Editor of **Feature Dimension Reduction for Content-Based Image Identification**; Publisher: IGI Global, Hershey, USA; Co-editors: Prof. Rik Das, Xavier Institute Of Social Service, Ranchi, Jharkhand and Prof. (Dr.) Siddhartha Bhattacharyya, RCC Institute of Information Technology, Kolkata, 2018. ISBN13: 9781522557753, ISBN10: 152255775X, EISBN13: 9781522557760, DOI: 10.4018/978-1-5225-5775-3

Author of **Hybrid Soft Computing for Multilevel Image and Data Processing**; Publisher: Springer International Publishing AG, Cham, Switzerland; Co-Authors: Prof. (Dr.) Siddhartha Bhattacharyya, RCC Institute of Information Technology, Kolkata, Prof. (Dr.) Susanta Chakraborty, Indian Institute of Engineering Science and Technology, Shibpur and Prof. (Dr.) Paramartha Dutta, Visva-Bharati University, Santiniketan; 2016; ISBN: 978-3-319-47523-3.

Editor of **Hybrid Soft Computing for Image Segmentation**; Publisher: Springer International Publishing AG, Cham, Switzerland; Co-editors: Prof. (Dr.) Siddhartha Bhattacharyya, RCC Institute of Information Technology, Kolkata, Prof. (Dr.) Paramartha Dutta, Visva-Bharati University, Santiniketan, and Dr. Goran Klepac, University College for Applied Computer Engineering, Croatia; 2016; ISBN: 978-3-319-47223-2.

Editor of **Intelligent Multidimensional Data Clustering and Analysis**; Publisher: IGI Global, Hershey, USA; Co-editors: Prof. (Dr.) Siddhartha Bhattacharyya, RCC Institute of Information Technology, Kolkata, Dr. Indrajit Pan, RCC Institute of Information Technology, Kolkata and Prof. (Dr.) Paramartha Dutta, Visva-Bharati University, Santiniketan; ISBN13: 9781522517764.

Editor of **Intelligent Analysis of Multimedia Information**; Publisher: IGI Global, Hershey, USA; Co-editors: Prof. (Dr.) Siddhartha Bhattacharyya, RCC Institute of Information Technology, Kolkata, Mr. Hrishikesh Bhaumik, RCC Institute of Information Technology, Kolkata, and Dr. Goran Klepac, University College for Applied Computer Engineering, Croatia; ISBN13: 9781522504986; DOI: 10.4018/978-1-5225-0498-6.

BOOKS IN
PROGRESS

Editing of **Advanced Machine Vision Paradigms for Medical Image Analysis**, Publisher: Elsevier; Co-editor: Dr. Tapan K Gandhi, Assistant Professor, Dept. of Electrical Engineering, Indian Institute of Technology, Delhi, India, Prof. (Dr.) Siddhartha Bhattacharyya, RCC Institute of Information Technology, Kolkata, India, Mr. Debanjan Konar, Department of Computer Science & Engineering, Sikkim Manipal Institute of Technology, Gangtok, Sikkim - 737136, India and Dr. Sandip Dey, OmDayal Group of Institutions, Birshibpur, Howrah-716311, India. (To be published in 2020)

Editing of **Computational Intelligence for Human Action Recognition**, Publisher: Taylor and Francis, CRC Press; Co-editor: Prof.(Dr.) Paramartha Dutta, Department of Computer & System Sciences, Visva Bharati University, Santiniketan, West Bengal, India. (To be published in 2020)

Editing of **Emerging Trends in Disruptive Technology Management for Sustainable Development**, Publisher: Taylor and Francis, CRC Press; Co-editors: Dr. Rik Das, Dept. of Information Technology, Xavier Institute of Social Service, Ranchi, Jharkhand, India and Dr. Mahua Banerjee, Dept. of Information Technology, Xavier Institute of Social Service, Ranchi, Jharkhand, India. (To be published in 2019)

Editing of **Recent Advances in Hybrid Metaheuristic for Data Clustering**, Publisher: John Wiley & Sons, UK; Co-editors: Dr. Sandip Dey, OmDayal Group of Institutions, Birshibpur,

Howrah-716311, India and Prof. (Dr.) Siddhartha Bhattacharyya, RCC Institute of Information Technology, Kolkata. (To be published in 2019)

PARTICIPATION IN CONFER-
ENCES/WORKSHOPS Attended and presented a paper at the **2014 Fourth International Conference of Emerging Applications of Information Technology (EAIT2014)** held at Indian Statistical Institute, Kolkata, India during December 19 to December 21, 2014.

Attended and presented a paper at the **2014 International Conference on Computational Intelligence and Communication Networks (CICN2014)** held at RCC Institute of Information Technology, Kolkata, India during November 14 to November 16, 2014.

Attended and presented a paper at the **2013 International Conference on Machine Intelligence Research and Advancement (ICMIRA-2013)** held at Shri Mata Vaishno Devi University(SMVDU), Katra, Jammu & Kashmir, India during December 21, 2013 to December 23, 2013.

Attended and presented a paper at the **2010 IEEE International Conference on Computational Intelligence and Computing Research (2010 IEEE ICCIC)** held at Tamilnadu College of Engineering, Coimbatore, Tamilnadu, INDIA during December 28 to December 29, 2010.

Attended and presented a paper at the **IEEE National Conference on Computing and Communication Systems (CoCoSys-09)**, held at University Institute of Technology during January 02 to January 04, 2009.

Attended and presented a paper at the **16th International Conference on Advanced Computing and Communication (ADCOM 2008)** held at Anna University Chennai, MIT Campus, Chennai, India during December 14 to December 17, 2008.

Presented online a paper at the **Applications of Soft Computing: From Theory to Praxis, Advances in Intelligent and Soft Computing**, Springer-Verlag, Berlin, Heidelberg, pp. 53-62, 2009.

Attended and presented a paper at the **National Conference on Nanotechnology And Its Application in Quantum Computing (NAQC 2008)** held at Government College of Engineering and Leather Technology, Kolkata, India during September 22 to September 24, 2008.

Attended and presented a paper at the **National Conference on Recent Trends in Intelligent Computing (RTIC 2006)** held at Kalyani Government Engineering College during November 17 to November 19, 2006.

Attended **TEQIP sponsored National Conference on “Data Mining & Knowledge Discovery - Identifying Potential Information”** held at Government College of Engineering and Textile Technology, Serampore, India during July 14th to July 15th, 2006.

PARTICIPATION IN REFRESHER COURSE Participated in **UGC sponsored 4th Refresher Course on “Information Communication Technology Application”** organized by Academic Staff College, The University of Burdwan, Burdwan, West Bengal from 06th March 2013 to 26th March 2013.

PARTICIPATION IN ORIENTATION PROGRAMME Participated in **UGC sponsored 91st Orientation Programme** organized by Academic Staff College, The University of Burdwan, Burdwan, West Bengal from 04th July 2013 to 31st July 2013.

PARTICIPATION IN WORK-SHOPS/SEMINARS Participated in a Short Term Training Programme on **Introduction to Soft Computing** organized by National Institute of Technical Teachers’ Training and Research (NITTTR), Kolkata from

January 14 to January 25, 2019.

Participated in One Week Short Term Training Program on “Machine Learning & Its Application” organized by National Institute of Technical Teacher’s Training & Research, Kolkata from 09th July 2018 to 13th July 2018, held at Cooch Behar Government Engineering College, Cooch Behar.

Participated in a Short Term Training Programme on **Image Processing using MATLAB** organized by National Institute of Technical Teachers’ Training and Research (NITTTR), Kolkata from June 19 to June 30, 2017.

Participated in a Workshop on **Big Data Analytics** co-organized by ACM Student Chapter, ISI Kolkata and Indian Statistical Institute from August 20 to August 21, 2015.

Participated in a TEQIP sponsored One Week Management Development Programme (MDP) on **Total Quality Management (TQM) in Technical & Higher Education** organized by University Institute of Technology, The University of Burdwan, from August 05 to August 9, 2013.

Participated in a AICTE sponsored Staff Development Programme on **Pattern Recognition: Principles and Application** organized by the department of Computer Science & Engineering, Kalyani Government Engineering College, Kalyani, West Bengal from June 7 to June 19, 2010.

Participated in a TEQIP sponsored 5-Days Workshop on **Challenges in VLSI Design: Cutting-edge Perspective** organized by the Department of Information Technology in collaboration with the School of VLSI Technology of Bengal Engineering and Science University, Shibpur, Howrah, India from July 21 to July 25, 2008.

Participated in a IEEE Gold Affinity Group, IEEE Calcutta section, CSE Department (TEQIP) and Computer Jagat sponsored one day Conference Tutorial on **2nd National Conference on Recent Trends in Information Systems (ReTIS-08)** organized by Computer Science & Engineering Department, Jadavpur University, West Bengal on 07th February, 2008.

Participated in a TEQIP sponsored Colloquium on **IMPACT: Of Images, Patterns, and Architectures in the Digital Era** organized by Department of Computer Science and Technology and Department of Information Technology of Bengal Engineering and Science University, Shibpur, Howrah, India from November 14 to November 16, 2007.

Participated in a Workshop on **Java and Web Technology** organized by the Department of Computer Science & Engineering of MCKV Institute of Engineering, Liluah, Howrah, W.B. from June 20 to June 22 2007.

Participated in a State Level Seminar on **Application of Cryptology in Industry and Crypt-analysis** organized by Department of Information Technology, RCC Institute of Information Technology held at C. V. Raman Hall, Science City, Kolkata on May 05, 2007.

Participated in a TEQIP sponsored One Day Seminar on **Recent Tools in Soft Computing** organized by the Department of Information Technology, Kalyani Government Engineering College, Kalyani on December 20, 2006.

Participated in a Retraining of College teachers under UGC Sponsored “University with Potential Excellence Scheme” course on **Operating system** organized by Jadavpur University, Kolkata on December December 07, 2006.

Participated in a National Seminar on **Data Mining & Knowledge Discovery - Identifying Potential Information** organized by Network Implementation Committee, TEQIP, Govt. College

of Engineering and Textile Technology, Serampore, India from July 14 - July 15 , 2006.

Participated in a TEQIP sponsored one day workshop on "Cryptography-Yesterday, Today and Tomorrow" organized by the Department of Computer Science & Engineering, Kalyani Government Engineering College, Kalyani on June 07, 2006.

Participated in a course entitled on "Object-Oriented Analysis and design using the UML with Fundamentals of Rational Rose" organized by University Institute of Technology, The University of Burdwan, Burdwan, W.B., from March 18, 2006 to March 22, 2006.

CONFERENCES &
SHORT-TERM
COURSES
ORGANIZED/
POSITION HELD

Acted as the Session Chair of "Computer Vision and Image Processing (Track-V)" held on 26th February, 2019 and "Computational Intelligence (Track-VI)" held on 27th February, 2019 in the Second International Conference on Advanced Computational and Communication Paradigms(ICACCP 2019) held at RCC InsSikkim Manipal Institute of Technology (SMIT) on February 25-28, 2019.

Acted as the Judge for the Technical Session of Engineering discipline (Track-1) 3rd Regional Science & Technology Congress, 2018 (WEST BENGAL, NORTHERN REGION) (RSTC2018) held at Jalpaiguri Government Engineering College, Jalpaiguri on December 12-13, 2018.

Acted as the Session Chair of "Track-VI" in the Fourth IEEE International Conference on Research in Computational Intelligence and Communication Networks (ICRCICN 2018) held at RCC Institute of Information Technology, Kolkata on November 23, 2018.

Served as Local Coordinator in One Week Short Term Training Program on "Machine Learning & Its Application" in collaboration with National Institute of Technical Teacher's Training & Research, Kolkata from 09th July 2018 to 13th July 2018 at Cooch Behar Government Engineering College, Cooch Behar.

Acted as the Session Chair of "Track-V (AISC): Computer Vision and Image Processing" in the First International Conference on Advanced Computational and Communication Paradigms (ICACCP-2017) held at Sikkim Manipal Institute of Technology (SMIT) on September 09, 2017.

Acted as the Reportier of "Track - VI: Computational Intelligence" in Third IEEE International Conference on Research in Computational Intelligence and Communication Networks (ICRCICN 2017) held at RCC Institute of Information Technology, Kolkata on November 05, 2017.

Convener in One day Seminar on "Internet of Things in Cloud platform" in Technical Collaboration with IEEE YOUNG PROFESSIONAL AFFINITY GROUPS , KOLKATA SECTION by the Department of Computer Science & Engineering, Cooch Behar Government Engineering College on April 12, 2017.

Convener in TEQIP-II sponsored One day Workshop on "Disaster Management" in association with Maulana Abul Kalam Azad University of Technology, W. B. and in Technical Collaboration with IEEE YOUNG PROFESSIONAL AFFINITY GROUPS , KOLKATA SECTION at Cooch Behar Government Engineering College on March 29, 2017.

Coordinator in "National Network Security Championship - India" in association with ACM IIT Delhi at University Institute of Technology, The University of Burdwan, Burdwan from 22nd - 23rd March, 2014.

MEMBERSHIPS OF
SCIENTIFIC AND
PROFESSIONAL
SOCIETIES

Member of IEEE, USA (Membership No. 90326534)

Member of Association for Computing Machinery (Membership No. 2387304)

Member of The Institution of Engineers (India) (Membership No. M-1585120)

Member of Computer Science Teachers Association (CSTA) (Membership No. 6912724.)

Life Member of Indian Society for Technical Education (Membershp no.- LM 55442)

Member of the International Association of Engineers (IAENG), Hong Kong (Membership no.- 64752)

Member of International Association of Engineers (Hong Kong) Societies of:

- Artificial Intelligence
- Bioinformatics
- Computer Science
- Imaging Engineering

POSITIONS OF
AUTHORITY HELD

Member of the Technical Proceedings & Publication Committee of IEEE National Conference on Computing & Communication , Jan 2-4, 2009 organized by UIT, The University of Burdwan.

Reviewer of Handbook of Research on Computational Intelligence for Engineering, Science and Business, IGI Global.

Reviewer of Global Trends in Knowledge Representation and Computational Intelligence, IGI Global.

Reviewer of Handbook of Research on Swarm Intelligence in Engineering, IGI Global.

Reviewer of Hybrid Soft Computing: Research and Applications; Publisher: Springer, India Pvt. Ltd.

Reviewer of Applied Soft Computing, Elsevier B. V. since 2015.

Reviewer of International Journal of Computers and Applications since 2015.

Reviewer of Intelligent Analysis of Multimedia Information, IGI Global.

Reviewer of Intelligent Multidimensional Data Clustering and Analysis, IGI Global.

Member of the Technical Program Committee in IEEE International Conference on Computational Intelligence and Communication Networks (ICCICN 2014) held on 14-16 November, 2014 at Kolkata, India.

Member of the Technical Program Committee in International Conference on Research in Computational Intelligence and Communication Networks (ICRCICN 2015) held during November 20 to November 22, 2015 at RCC Institute of Information Technology, Kolkata.

Member of the Technical Program Committee in INDIA-2015, IC3T-2015, ICICT-2015, IC4SD-2015 and ICTIS-2015 in the year 2015.

Member of the Technical Program Committee in Sixth International Conference on Communication Systems and Network Technologies (CSNT 2016) held on 05-07 March, 2016 at Chandigar, India.

Reviewer in Third International Conference on Information systems Design and Intelligent Applications (INDIA-2016) held on 08-09 January, 2016 held at Visakhapatnam.

Reviewer in First International Conference on Data Engineering and Communication Technology (ICDECT-2016) held on 10-11 March, 2016 held at Pune.

Member of the Technical Program Committee in Second International Conference on Research in Computational Intelligence and Communication Networks (ICRCICN 2016) held during September 23 to September 25, 2016 at RCC Institute of Information Technology, Kolkata.

Acted as Editorial Board Member in International Journal of Hybrid Intelligence; Inderscience.

Member of the Technical Program Committee in IEEE International Conference on Advanced Computational and Communication Paradigms - 2017 (ICACCP-2017) held during September 08-10, 2017 at Sikkim Manipal Institute of Technology, Sikkim.

Member of the Technical Program Committee in 7th International Conference on Communication Systems and Network Technologies (CSNT-2017) held during November 11-13, 2017 at Indian Institute of Information Technology (IIIT), Nagpur.

Member of the Technical Program Committee in 9th International Conference on Computational Intelligence and Communication Networks (CICN-2017) held during September 16-17, 2017 at Final International University, Cyprus.

Member of the Technical Program Committee in Third International Conference on Research in Computational Intelligence and Communication Networks (ICRCICN 2017) held during November 03-05, 2017 at RCC Institute of Information Technology, Kolkata.

Reviewer of International Journal of Computers and Applications, Taylor & Francis.

Member of the Technical Program Committee in Fourth International Conference on Research in Computational Intelligence and Communication Networks (ICRCICN 2018) held during November 22-23, 2018 at RCC Institute of Information Technology, Kolkata.

Member of the Technical Program Committee in IEEE Second International Conference on Advanced Computational and Communication Paradigms - 2019 (ICACCP-2019) held during February 25-28, 2019 at Sikkim Manipal Institute of Technology, Sikkim.

Member of the Technical Program Committee in First International Symposium on Computer Vision and Machine Intelligence in Medical Image Analysis (ISCMM-2019) held during February 26-27, 2019 at Sikkim Manipal Institute of Technology, Sikkim.

Member of the Technical Program Committee in eHaCON2019 International Ethical Hacking Conference will be held during August 22-25, 2019 at Institute of Engineering & Management, Kolkata.

Member of the Technical Program Committee in 5th International Conference on Fuzzy Systems and Data Mining (FSDM2019) will be held during October 18-21, 2019 at Kitakyushu International Conference Center, Kitakyushu City, Japan.

OTHER ACADEMIC
AND
ADMINISTRATIVE
DUTIES

Acted as the **External examiner** for B. Tech. Seventh Semester Project Presentation Examination for Computer Science & Engineering of Jalpaiguri Government Engineering College on November 29-30, 2018.

Acted as the **External examiner** for B. Tech. Practical Examinations for Information Technology 1st year and 3rd year of RCC Institute of Information Technology in 2015.

Acted as the **External examiner** for B. Tech. Practical Examinations for Information Technology

1st year and 3rd year of RCC Institute of Information Technology in 2014.

Acted as the **External examiner** for B. Tech. Project Seminar for Information Technology 4th year of RCC Institute of Information Technology in 2014.

Acted as the **Head Examiner** of Information Technology for the B. E. Even Semester Examination, 2013-14 of The University of Burdwan, Burdwan.

Acted as the **Head Examiner** of Information Technology for the B. E. Even Semester Examination, 2010-11 of The University of Burdwan, Burdwan.

Acted as the **Head Examiner** of Information Technology for the B. E. Odd Semester Examination, 2006-07 of The University of Burdwan, Burdwan.

Acted as the **Member** of Under-Graduate Board of Studies of The University of Burdwan, Burdwan from March 2006 to March 2016.

Acted as the **Member** of the Departmental Academic Affairs committee in University Institute of Technology, The University of Burdwan, Burdwan.

Acted as the **Member** of the Departmental Syllabus committee in University Institute of Technology, The University of Burdwan, Burdwan.

Acted as the **Member** of the Departmental NBA committee in the Department of Information Technology, University Institute of Technology, The University of Burdwan, Burdwan.

Acted as the **Member** of the Departmental Laboratory Maintenance Committee: **Faculty in Charge** of Sir J. C. Bose Computer Lab in University Institute of Technology, The University of Burdwan, Burdwan.

Acted as the **Member** of the Students Welfare & Sports Cell of University Institute of Technology, The University of Burdwan, Burdwan.

Acted as the **Member** of TEQIP Academic Unit of University Institute of Technology, The University of Burdwan, Burdwan.

Acted as the **Member** of the Examination cell of University Institute of Technology, The University of Burdwan, Burdwan from June 2010 to May 2011.

Acted as the **Member** of coordination committee One Week National Level Staff Development Program on "Soft Computing" from 01st - 05th July 2013.

REFERENCES

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3. Prof. (Dr.) Susanta Chakraborty, Indian Institute of Engineering & Technology, Shibpur, Howrah, India; email: susanta.chak@gmail.com

Cooch Behar, India
March 26, 2019

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Sourav De