Name: Dr. Jaya Mukhopadhyay

Department: Basic Science and Humanities (Mathematics)

Contact Nos.: +919474730842

Qualifications: Ph.D.

Designation: Assistant Professor - Grade II

VIDWAN ID: 184802

Experience (Teaching / Research / Industry, in years): Teaching: 13 years (9 years in BCREC and 4 years in other colleges) Research: 6 Years

Date of Joining at the Present Institution: 3rd July, 2012

Examinations Cleared: NA

Qualifications Summary (Reverse chronological order):

Degree	Institute	From – To	Subjects
Ph. D	National Institute of Technology, Durgapur	Jan, 2016- Sep, 2021	Auction Adaptive Participatory Sensing
M. Sc.	Bengal Engineering and Science University, Shibpur	2006-2008	Applied Mathematics
B. Sc. (Mathematics)	Midnapore College (Vidyasagar University)	2003-2006	Mathematics (Hons.) PHSG, CEMG, ENGC, BNGM



Higher	Garhbeta High School (H.S)	2001-2003	BNGA, ENGB, CHEM,
Secondary	(W.B.C.H.S.E)		MATH, PHYS, BIOS
Madhyamik Pariksha	Garhbeta Umadevi Girls' High School (W.B.B.S.E)	1999-2001	BENGALI, ENGLISH, MATHEMATICS, PHYSICAL SCIENCE, LIFE SCIENCE, HISTORY, GEOGRAPHY

Experience Summary (In chronological order):

Designation	Organization	Date From – Date To (DD/MM/YYY)
Lecturer	Mallabhum Institute of Technology (Department of	25/07/2008 to 8/02/2010
Lecturer	Mathematics), Bishnupur Bengal College of Engineering and Technology for Women, Durgapur	09/02/2010 to 02/07/2012
Assistant Professor (Grade-I)	Dr. B. C. Roy Engineering College, Durgapur	03/07/2012 to 31/12/2019
Assistant Professor (Grade-II)	Dr. B. C. Roy Engineering College, Durgapur	01/01/2020 to Till Date

Specialization/Research Interest: Operations Research, Game Theory, and Participatory Sensing

Awards & Recognitions

1. Best paper award for the paper entitled "Participatory Sensing System in Presence of Multiple Buyers" in 11th International Multi Conference on Information Processing (IMCIP 2015), August 21-23, 2015, Bengaluru, India, Elsevier, ISSN: 1877-0509.

Courses taught: B. Tech

- 1. B. Tech (Theory):
 - a. Mathematics I (M101)
 - b. Mathematics II (M201)
 - c. Mathematics III (M302, M402)
 - d. Mathematics IV (M401)
 - e. Numerical Methods (M(CS)301, M(CS)401)

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- f. Operations Research (CS605A)
- g. Mathematics IA (BS-M101)
- h. Mathematics IB (BS-M102)
- i. Mathematics IIB (BS-M201)
- j. Mathematics III (BS-M301, BSC-301)
- k. Numerical Methods (BS-M401, OEC-IT-601A)

2. B. Tech (Laboratory):

- a. Numerical Methods lab (M(CS)-391, M(CS-)491)
- b. Numerical Methods lab (PC-CS 391, BS-M(CS)491)
- 3. B. Pharm (Theory): Remedial Mathematics (M183)
- 4. M. Tech: specify the name of the Subject/s: NIL

Online Mode of Teaching:

- Supplied teaching materials online.
- Assessed students by setting questions in Google Forms.
- Assessed students by providing assignments online.

Publications:

Journal:

1. Mukhopadhyay, J., Singh, V. K., Mukhopadhyay, S., Dhananjaya, M. M., & Pal, A. "An egalitarian approach of scheduling time restricted tasks in mobile crowdsourcing for double auction environment", 2021, International Journal of Web and Grid Services, 17(3), 221-245, ISSN: 1741-1106 (SCI)

DOI: https://doi.org/10.1504/IJWGS.2021.116536

2. Mukhopadhyay, J., Singh, V. K., Mukhopadhyay, S., Pal, A., & Kumar, A., "A truthful budget feasible mechanism for IoT-based participatory sensing with incremental arrival of budget", 2021, Journal of Ambient Intelligence and Humanized Computing, 1-18, Print ISSN :1868-5137. (SCI) DOI: https://doi.org/10.1007/s12652-020-02844-9

3. J. Mukhopadhyay, V. K. Singh, S. N. Mishra, S. Mukhopadhyay, and A. Pal, "Quality Adaptive Online Double Auction in Participatory Sensing", Journal of Informatics and Mathematical Sciences, Oct. 2017, Vol. 9, No. 3, pp. 571 - 593, ISSN: 0975-5748. (ESCI) Link: https://www.rgnpublications.com/journals/index.php/jims/article/view/762

4. J. Mukhopadhyay, A. Pal, S. Mukhopadhyay, and V. K. Singh, "Participatory Sensing in Online Double Auction Environment", International Journal of Pure and Applied Mathematics, Apr. 2016, Vol. 106, No. 7, pp. 109 - 120, ISSN: 1311-8080. (Scopus) Link: url: http://www.ijpam.eu DOI: 10.12732/ijpam.v106i7.12

Conference:

 Mukhopadhyay, J., Singh, V. K., Mukhopadhyay, S., & Pal, A., "A Balanced Dissemination of Time Constraint Tasks in Mobile Crowdsourcing: A Double Auction Perspective", 15th International Conference on P2P, Parallel, Grid, Cloud and Internet Computing, Springer, Cham. (3PGCIC 2020), October 28-30, 2020, International Conference, Springer, Print ISBN: 978-3-030-61105-7.

DOI: <u>https://doi.org/10.1007/978-3-030-61105-7_8</u>

Organized by- Editors: Leonard Barolli, Makoto Takizawa, Tomoki Yoshihisa, Flora Amato, Makoto Ikeda.

Venue- Yonago City, Tottori, Japan

- J. Mukhopadhyay, V. K. Singh, S. Mukhopadhyay, and A. Pal, "Clustering and Auction in Sequence: A Two Fold Mechanism for Participatory Sensing", 4th International Conference on Harmony search, Soft computing and Applications (*ICHSA 2018*), Feb 07-09, 2018, International Conference, Springer, Print ISBN 978-981-13-0760-7.
 DOI: <u>https://doi.org/10.1007/978-981-13-0761-4_34</u>
 Organized by- School of Engineering & Technology, BML Munjal University, Gurugram. Venue- BML Munjal University, Gurugram, Haryana, India.
- **3.** J. Bhattacharjee, A. Pal, S. Mukhopadhyay, and V. K. Singh, *Participatory Sensing System in Presence of Multiple Buyers*, 11th International Multi Conference on Information Processing (IMCIP 2015), August 21-23, 2015, International Conference, Elsevier, ISSN: 1877-0509. (ICDMW 2015)

DOI: https://doi.org/10.1016/j.procs.2015.06.028

Organized by- The Society of Information Processing, Bengaluru and University Visvesvaraya College of Engineering, Bangalore University, Bengaluru.

Venue- The Hotel Capitol, Raj Bhavan Road, Next to Vidhana Soudha, Bengaluru-560001

Book: NIL

Book Chapter: NIL

Supervision of Ph. D/M. Tech / B. Tech Projects: NIL

Invited Lectures:

Topic of the lecture	Name of the event	organized by	Date
Participatory Sensing:	Optimization	ORSI Durgapur	25th JULY 2021
A Game Theoretic	Through Real Life	Chapter	
Perspective	Application &	_	
_	Implementations		
	(WOORA - 2021)		

Participation in seminar/conference/symposium/workshop/discussion meeting

Name of the Event	Duration	Year	Organized by
International	21 st -25 th November	2011	NIT Durgapur
Workshop on "Fuzzy		2011	
Sets Rough Sets			
Uncertainty Analysis			
and Applications"			
Technical Workshop	23 rd -24 th November	2013	Dr. B. C. Roy
on Recent Trends in			Engineering College
Machine Intelligence,			Durgapur
Data Mining, Soft			01
Computing			
Techniques and its			
Impact on Research			
and Development			
Workshop on "Signed	3 rd -7 th October	2016	NIT Durgapur
Graphs and Semi			
Graphs"			
Seminar on Enterprise	21 st January	2020	Dr. B. C. Roy
Architecture and its	-		Engineering College
security			Durgapur
11th International	21st -23rd August	2015	The Society of
Multi Conference on			Information
Information			Processing, Bengaluru
Processing (IMCIP			and University
2015)			Visvesvaraya College
			of Engineering,
			Bangalore University,
			Bengaluru.
4th International	7th -9th February	2018	BML Munjal
Conference on			University,
Harmony search, Soft			Gurugram, Haryana,
computing and			India
Applications (ICHSA			
2018)			
15 th International	28th -30th October	2020	Yonago, Tottori, Japan
Conference on P2P,			
Parallel, Grid, Cloud			
and Internet			
Computing, Springer,			
Cham. (3PGCIC 2020)			

Participation in faculty development programmes

- Faculty Development Programme on "Behavioral Remodeling and Use of ICT tools for Class Room Delivery of Teachers", Face-to-face, 14-19th January, 2019 organized by Dr. B. C. Roy Polytechnic, Durgapur.
- 2. Faculty Development Programme on "Higher Education 2020: Requirements and Expectations", Online, 8-12th July, 2020 organized by Internal Quality Assurance Cell (IQAC), TPCT's College of Engineering, Osmanabad.
- **3.** Faculty Development Programme on "Role of Mathematics in Engineering Disciplines", Online, 3-7th August, 2020 organized by Department of Basic Science and Humanities of Stella Mary's College of Engineering, Aruthenganvilai.
- **4.** Faculty Development Programme on "Inculcating Universal Human Values in Technical Education", Online, 2-6th August, 2020 organized by All India Council for Technical Education (AICTE).

Organization of events (Dr. B. C. Roy Engineering College): NIL

Name of the Post	Name of the Committee	Year
Member, Reception sub-	Reception sub-committee (for	2015
committee	the event Induction and	
	Orientation Programme)	
Race Management Event	Sports Committee	2017
Member, Steering committee	Steering committee (for the	2018
	event One day Seminar on	
	Strategic Communication	
	Management for Engineering	
	ProfessionalIssues and	
	Challenges)	
Faculty Coordinators	Tech Fest	2019
Race Management Event	Sports Committee	2019
Member, Guardians	Guardians Assistance &	2019
Assistance & Reception Team	Reception Team Committee	
	(for the event Induction and	
	Orientation Programme)	
Registration Desk and Hall	Registration Desk and Hall	2019
Management	Management Committee (for	
	the event Workshop on Digital	
	Evaluation)	
Faculty and Staff coordinators	Cultural Programme	2020
Race Management Event	Sports Committee	2020
Reception Management	Reception Committee (for the	2020
	event Awareness Programme	
	on increasing cyber-crime and	
	Awareness Programme on	
	Safe Drive and Save Life)	

Participation in administrative committees (selected):

Project Ideas Submitted to Govt. Agencies/ On-going Projects / Research Ideas under preparation & execution: NIL

Membership of professional bodies: ORSI