Name: Dr. Tushnik Sarkar

Department: EE

Contact Nos.: 9734810928

Qualifications: Ph. D.

Designation: Assistant Professor

VIDWAN ID: 193460

Experience (Teaching / Research / Industry, in years): 11.25 Years

Date of Joining at the Present Institution: 29.07.2010

Examinations Cleared: GATE

Qualifications Summary (Reverse chronological order):

Degree	**Institute**	**From – To**	**Subjects**
Ph. D	NIT-Durgapur	2015-2019	Electrical Engg
M.E.	Jadavpur University	2008-2010	Electrical Engg (Illumination)
B.Tech	Kalyani University	2003-2007	EIE
12th	Kalna Maharajas High School	2003	Pure Science
10th	Simlon AK Vidyamandir	2001	Gen

Experience Summary (In chronological order):

Designation,	Organization,	Date From – Date To
Assistant Professor	Dr. B.C.Roy Engg. College, Durgapur	29.07.2010-Till today

Specialization/Research Interest: Signal Processing

Courses taught:

B.Tech: Specify the name of the subject/s (Theory first and then practical)

Theory: Basic Electrical, Electrical Circuit Theory, Electromagnetic Fields, Electrical and

Electronic Measurement, Digital Electronics, Microprocessor and Microcontroller, Digital Signal Processing, Process Control.

Practical: Basic Electrical, Electrical and Electronic Measurement, Microprocessor and Microcontroller, Power Electronics.

M.Tech: specify the name of the Subject/s: Microprocessor and Microcontroller

Online Mode of Teaching:

The Faculty member needs to specify the online teaching/ assessment method adopted. (Link to any faculty created resources for Lecture notes / PPT/ Video Lecture etc. in Google Drive / Weblink etc)

PDFs of hand written Class Notes, Video documents, PPT, Google Meet, Google Forms

Publications:

Journal:

1. **Tushnik Sarkar**, R. Ray, M. H. Khondekar, K. Ghosh & S. Banerjee, "Chaos and Periodicity in Solar Wind Speed: Cycle 23", Astrophysics and Space Science, Springer (2015) Volume 357, Issue128, pp-1-10
   ISBN/ISSN number: 0004-640X (print) 1572-946X (web)
   DOI: 10.1007/s10509-015-2357-9
   Link : (PDF) Chaos and periodicity in solar wind speed: cycle 23 (researchgate.net)

2. **Tushnik Sarkar**, M. H. Khondekar & S. Banerjee, "Dynamics of solar wind speed: Cycle 23", Advances in Space Research 59 (2017) ,Elsevier,pp-2196–2205
   ISBN/ISSN number: 0273-1177
   DOI: 10.1016/j.asr.2017.01.049
   Link : Dynamics of solar wind speed: Cycle 23 (infona.pl)

3. **Tushnik Sarkar**, M H Khondekar, and S Banerjee, "Signal Processing Approach to Study Multi-fractality and Singularity of Solar Wind Speed Time Series," International Journal of Computer, Electrical, Automation, Control and Information Engineering, (2017) vol. 11, no. 2, pp. 97-102

   DOI: doi.org/10.5281/zenodo.1339884

   Link : Signal Processing Approach to Study Multifractality and Singularity of Solar Wind Speed Time Series (waset.org)

Book Chapter:

Tushnik.Sarkar, M H Khondekar & S.Banerjee, "Wavelet Based Fractal Analysis of Solar Wind Speed Signal" pp. 39-48 " Recent Trends in Signal and Image Processing" (Springer, 2017) Print ISBN: 978-981-10-8862-9, Online ISBN: 978-981-10-8863-6.

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

B.Tech Projects:

University roll number of the students	**Name of the supervisor**	**Title of the Project**	**Year**
12001617087 12001618015 12001617085 12001617103 12001617094 12001617082	Tushnik Sarkar	Android based electrical appliance control	2020-21
12001616124 12001616034 12001616103 12001616033 12001616123 12001616121 12001616144	Tushnik Sarkar	Speed Control of ac motor through Adriano	2019-20
12001616010, 12001616011, 12001616012, 12001616008, 12001616014, 12001615076	Tushnik Sarkar	Line Follower Robot without using Microcontroller	2018-2019

Invited Lectures: NA

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

Participation in faculty development programmes

Name of the faculty development programmes		From Date – To Date	Year	Organized by
1 Week HANDS-ON Faculty Development Program on Artificial Intelligence using Python	Online	from 14th -19th Sep, 2020	2020	Department of Computer Science & Technology of Dr. B. C. Roy Polytechnic in association with Brainovision Solutions India Pvt.Ltd. & National Youth Council of India
One Week Faculty Development Programme on " Renewable Energy Technologies for Sustainable Development"	Online	from 15th - 19th June, 2021	2021	Department of Electrical Engineering, Dr. B. C. Roy Polytechnic (A Unit of Dr. B. C. Roy Engineering College, Durgapur
One Week Faculty Development Programme on Modern Trends in Electrical engineering	Online	from 23rd - 27th June, 2021	2021	Department of Electrical Engineering, Dr. B. C. Roy Polytechnic (A Unit of Dr. B. C. Roy Engineering College, Durgapur
International Webinar On "Modern Trends of Electrical Engineering and its Applications"	Online	from 20th-24th December, 2020	2020	Department of Electrical Engineering. Dr. B. C. Roy Engineering College, Durgapur

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

Participation in administrative committees (selected)

Name of the post (Convener/Joint Convenor/Member secretary/Co-ordinator etc.), Name of the committee, year

1. Departmental Routine Committee Member.

2. Departmental Training & Placement Coordinator.

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

Membership of professional bodies: IEEE, IETE, IEI, CSI, MGMI etc.: NA