

**Name:** Anirban Chattopadhyay

**Department:** ECE

**Contact Nos.:** 8250822459

**Qualifications:** M.tech, B.E.

**Designation:** Asst. professor



VIDWAN ID: <https://vidwan.inflibnet.ac.in/profile/185695>

**Experience (Teaching / Research / Industry, in years):** 12 years

**Date of Joining at the Present Institution:** 01/08/2008

**Examinations Cleared:**

Degree	Institute	From – To	Subjects
M.Tech.	NIT-Durgapur	2005-07	ECE
B.E.	Pryadarshini College of Engg & Arch.	2001-05	ECE

**Experience Summary:**

Asst. professor      Dr. B. C. ROY Engineering College, Durgapur      01/08/2008- till date

**Specialization/Research Interest:**

Time series analysis, Power-line Communication

**Courses taught:**

Theory: Analog Communication, Digital Communication, Information Theory, Wireless Communication & N/W, Computer Networks, Basic Electronics, Digital electronic, Digital and Analog Electronics  
Labs: Analog Communication, Digital Communication, Digital Signal Processing, Computer Networks, Advance Communication, Basic Electronics, Analog Electronics, Digital electronic, Digital and Analog Electronics, Design Lab

**Online Mode of Teaching:**

[https://drive.google.com/file/d/1FLkJ9\\_BjOZxhEiL43CX-foNNFTDg8HSW/view?usp=sharing](https://drive.google.com/file/d/1FLkJ9_BjOZxhEiL43CX-foNNFTDg8HSW/view?usp=sharing),  
<https://drive.google.com/file/d/1WCAbACIn-7ELGRvmFf6sI39HiQ4CcGpo/view?usp=sharing>,  
<https://drive.google.com/file/d/1YpliJj26OBmAEOWsSno4rfGjbICFywu/view?usp=sharing>,  
<https://drive.google.com/file/d/1qE28UnAUZov8xKx7KAS5X8CJqcaON3mr/view?usp=sharing>  
[https://drive.google.com/file/d/1imxvzhe1H1xZo5IYFT\\_aPVqWEV8V3QFf/view?usp=sharing](https://drive.google.com/file/d/1imxvzhe1H1xZo5IYFT_aPVqWEV8V3QFf/view?usp=sharing)

**Publications:**

### International Journals:

1. A. Chandra, **A. Chattopadhyay**, K. Sharma, S. D. Roy, “*Bit error rate of RS coded BFSK in broadband powerline channels with background Nakagami and impulsive noise*”, **Physical Communication, Elsevier, Netherlands**, vol. 14, pp. 14–23, 2014. doi.org/10.1016/j.phycom.2014. **SCI Impact Factor: 1.84.**
2. **A. Chattopadhyay**, M. H. Khondekar, A. K. Bhattacharya, “*Stationarity and Periodicities of linear speed of Coronal Mass Ejection: A Statistical signal processing approach*”, **Astrophysics And Space Science, Springer, Germany**, Vol. 362, No. 9, pp. 1-12, 2017. doi.org/10.1007/s10509-017-3157-1. **SCI Factor: 1.83.**
3. **A. Chattopadhyay**, M. H. Khondekar, A. K. Bhattacharjee, “*Fractality and singularity in CME linear speed signal: Cycle 23*”, **Chaos, Solitons and Fractals, Elsevier, UK**, vol. 114, pp. 542–550, 2018. doi.org/10.1016/j.chaos.2018.08.008. **SCI Impact Factor: 5.94.**
4. **Chattopadhyay, A.**, Chandra, A., Khondekar, M.H. and Bhattacharjee, A.K., “*Analysis of fractality and complexity of the planetary K-index*”, **SN Applied Sciences, Springer**, Vol. 3, No. 6, pp.1-15, 2021. <https://doi.org/10.1007/s42452-021-04622-4>.

### International Conference:

1. **A. Chattopadhyay**, M. H. Khondekar, A. K. Bhattacharjee, “*Multivariate Singular Spectral Analysis (MSSA) to explore geomagnetic storm and CME bond*”, **IEEE Conference on Applied Signal Processing ( ASPCON), Jadavpur University, Kolkata**, Dec. 2019, pp. 79-82. doi: 10.1109/ASPCON.2018.8748835.
2. S. Manna, S. Saha, **A. Chatterjee**, C. Day, “*Spectrum sensing with cooperation and multi antenna based adaptive decode and forward relay*”, **International Conference on Computing, Communication and Networking Technologies (ICCCNT), IIT-Delhi**, 2017, pp. 1-6. DOI: 10.1109/ICCCNT.2017.8203953.
3. **A. Chattopadhyay**, M. H. Khondekar, A. K. Bhattacharjee, “*Complexity of CME Linear Speed time series*”, **International Conference on Signal Processing and Communication (ICSC), Noida**, 2016, pp. 474–478. doi: 10.1109/ICSPCom.2016.7980627.
4. **A.Chattopadhyay**, K. Sharma, A. Chandra, “*Error performance of RS coded binary FSK in PLC channels with Nakagami and impulsive noise*”, **IEEE International Symposium on Power Line Communications and Its Applications (IEEE ComSoc Portfolio Event), Glasgow, Scotland**, 2014, pp. 184–189. DOI: 10.1109/ISPLC.2014.6812369.
5. **A. Chattopadhyay**, A. Chandra, and A. K. Bhattacharjee, “*A simplified analytical and simulation framework for evaluating BER of RS coded digital signal in Rician fading channels*,” **Conference on Communications, Devices and Intelligent Systems (CODIS), Jadavpur University, Kolkata**, 2012, pp. 405–408. DOI: 10.1109/CODIS.2012.6422224.

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

## Projects:

1. Ankita Banerjee 12000316120, Apurba Halder 12000316116, Saket kumar 12000316046, Kirti singh 12000316097, Koushani Dutta 12000316096, Prof. Anirban Chattopadhyay, "Error performance of OFDM Transmission In AWGN and Rayleigh fading channel", 2020.
2. ROMHARSHAN SAKET 12000315086, AKSHAY KANT 12000315006, ABINASH GUPTA 12000315002, AYUSH KUMAR JHA 12000315027, AULINA DHAL 12000315025, NIKITA CHOUDHARY 12000315067, Prof. Anirban Chattopadhyay, "CHARACTERIZATION OF FGN OR FBN NOISE AND ANALYSIS OF CHAOTIC BEHAVIOUR OF GLOBAL TEMPERATURE TIME SERIES :A STASTICAL SIGNAL PROCESSING APPROACH", 2019.
3. 12000314089 SHRIJIT RAJAK, 12000314110 TANMOY BASULI, 12000314117 VIVEK NAHATA, Prof. Anirban Chattopadhyay,, "Denoising and Multifractality of Planetary K Index", 2018.
4. 12000314103 SUDIPTO SAHA, 12000314101 SOUVIK MANNA, Prof. Anirban Chattopadhyay , "Spectrum sensing with cooperation of multi antenna based adaptive decode and forward relay", 2018.
5. RONIT KUMAR 12000313078, KANISHKA SINHA 12000313040, DIKSHA SINGH 12000313030, UJJWAL KUMAR 12000313113, MANISHA MUNSHI 12000313046, PREETI CHANDRA 12000313060, Prof. Anirban Chattopadhyay, "Characterization and Clustering of CME Linear Speed Signal: A Statistical Signal Processing Approach", 2017.
6. ADIBA ASLAM 12000312005, NEHA BHARTI 12000312062, ABHINASH SHAH 12000312004, NEERAJ KUMAR 12000312064, SAURAV 12000312089, Prof. Anirban Chattopadhyay, "An Improved TFR Analysis Method SPWVD for non stationary Time series Analysis and Measuring the complexity of time series", 2016.

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

Short Term Course on Internet of Things: Architectures, Protocols, Applications and security concerns, 14th - 18th Dec, 2020, Department of Computer Science & Technology, Indian Institute of Engineering Science And Technology, Shibpur.

Webinar on International Webinar on Scope of Research Post Covid-19, 17th July, 2020, Dr. B. C. Roy Polytechnic, Durgapur.

Webinar on International webinar on Emotional first aid to reduce performance anxiety, 28th July, 2020, Dr. B. C. Roy Polytechnic, Durgapur.

Teaching & Learning Skill Development, 22<sup>nd</sup> Aug, 2019, IEEE student branch & IEI student chapter, BCREC.

Full custom VLSI design using mentor graphics, 15-17<sup>th</sup> May, 2019, CoreEL Technologies Pvt. Ltd., BCREC.

Applied Signal Processing Conference, 7-9 Dec, 2018, IEEE Signal Processing Society, Jadavpur university.

International Conference on Signal Processing and Communication, 26-28<sup>th</sup> Dec, 2016, IEEE Jaypee University, Noida.

International Conference on Communication, Devices and Intelligent System, 28-29<sup>th</sup> Dec, 2012, IEEE Communication Society, Jadavpur University.

Workshop on Advance Wireless Communication and Networking, 28<sup>th</sup> Oct to 1<sup>st</sup> Nov., 2013, NIT-Durgapur.

Workshop on NMEICT Awareness, 9<sup>th</sup> May, 2013, NIT-Durgapur.

Short term course on Optical Communication Networks, 22<sup>nd</sup> June- 03<sup>rd</sup> July, 2009, IIT-Kharagpur.

### **Participation in faculty development programmes**

Behavioural Remodelling with Mentoring Pedagogy and Need of Mental Health Sessions for Classroom Delivery of Teachers, Face-to-face, 8-12 Jan, 2020, One-Week, Dr. B.C.Roy Polytechnic, Durgapur.

### **Organization of events (Dr. B. C. Roy Engineering College)**

IEEE-National Conference on Emerging Trends on Sustainable Technology and Engineering Applications (NCETSTEA 2020), Publicity Co-chair.

Seminar on Enterprise Architecture & its Security, 2020.

Visit of Hon'ble Vice-Chancellor on 18.09.2019, 2019.

Seminar on Integration of Global Navigation Satellite Systems (GNSS) with Wireless Communication and Networks 2018, Program vice Co-Chair.

National Seminar on Green Chemistry- Challenges & Technological opportunities in India 2016, Programme vice Co-Chair.

Tech Fest (Convener), 2020,19,18,17,16.

Orientation Programme, 2019 (Refreshment committee-Convener),18,17(Venue Management committee-Jt. Convener),16 (Refreshment committee- Convener).

Annual Sports (Co-ordinator), 19,18,17,16.

Sree Saraswati Puja (Asst Secretary), 2017.

### **Participation in administrative committees (selected)**

NBA & Dept Routine Committee (Convener)

NBA & Dept Budget Committee (Co-ordinator)

Dept Lab incharge

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