



# Dr. Tarun Kumar Das

Associate Professor with Ph.D/Doctorate in Electronics/Telecommunication, currently living in Kolkata

## GET IN CONTACT

Mobile: +91-9749843865/ +91-7501840046

Email: tarunj1979@gmail.com

## PERSONAL DETAILS

- **Total Experience:** 20 Years 2 Months
- **Current Location:** Kolkata
- **Date of Birth:** Apr 02, 1979
- **Gender:** Male
- **Marital Status:** Married

## SKILLS

- Teaching
- Professor Activities
- Educational Administration
- Microwave Engineering
- Communication Engineering
- Signal Processing
- Analog Electronics
- Digital Electronics
- Information Theory And Coding
- Circuit Theory
- Wireless Communication
- Mobile Communication
- Research
- Control System
- VLSI
- Neural Networks
- Fuzzy Logic
- Artificial Intelligence
- Machine Learning

## TECHNICAL SKILLS

- PSpice
- MATLAB
- HDL
- Ie3d
- Scilab
- MS Office
- MS Office PowerPoint
- Multisim

## PROFILE SUMMARY

I am working as a faculty from 2004 and have taken almost all papers in ECE syllabus. I have guided more than 30 B.Tech. projects, 6 M.Sc. projects. I have published more than 27 research papers during my Ph.D. work. I am a drama artist. I have written, acted and directed more than 20 drama with my students. I have worked a teacher mentor of students cultural club, social activity club. I am a social worker acting as the President of a NGO at Joynagar.

## EDUCATION HISTORY

### Doctorate

Course	Ph.D/Doctorate (Electronics/Telecommunication )
College	Jadavpur University
Year of Passing	2023
Grade	9/10

### Post Graduation

Course	M.Tech( Computers )
College	West Bengal University of Technology (WBUT)
Year of Passing	2008
Grade	8.3/10

### Graduation

Course	B.Tech/B.E. (Electronics/Telecommunication)
College	Murshidabad College of Engineering and Technology, Murshidabad
Year of Passing	2003
Grade	8.6/10

### Class XII

Board	West Bengal
Medium	Bengali / Bangla
Year of Passing	1997
Grade	70-74.9%

### Class X

Board	West Bengal
Medium	Bengali / Bangla
Year of Passing	1995
Grade	85-89.9%

## **LANGUAGES KNOWN**

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- ENGLISH
  - HINDI
  - BENGALI
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## **WORK EXPERIENCE**

September 2004 to Present

**Associate Professor at Future Institute of Engineering  
and Management (FIEM)**

ACADEMICIAN

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## **OTHER INTERESTS**

Acting and directing Bengali drama, script writing,  
listening music, art and crafts, painting, and playing  
football, writing and reciting poems

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## **EXTRA-CURRICULAR ACTIVITY**

Social Worker, Teaching to unprivileged  
kids

## PROFESSIONAL RESEARCH IDS

NAME	ID	URL
GOOGLE SCHOLAR	pq0Ae0QAAAAJ	<a href="https://scholar.google.com/citations?user=pq0Ae0QAAAAJ&amp;hl=en">https://scholar.google.com/citations?user=pq0Ae0QAAAAJ&amp;hl=en</a>
SEMANTIC SCHOLAR	7289051	<a href="https://www.semanticscholar.org/me/research">https://www.semanticscholar.org/me/research</a>
ORCID	0000-0001-8287-3435	<a href="https://orcid.org/my-orcid?orcid=0000-0001-8287-3435">https://orcid.org/my-orcid?orcid=0000-0001-8287-3435</a>
VIDWAN	438901	<a href="https://vidwan.inflibnet.ac.in/myprofile">https://vidwan.inflibnet.ac.in/myprofile</a>
RESEARCH GATE	Tarun-Das-6	<a href="https://www.researchgate.net/profile/Tarun-Das-6">https://www.researchgate.net/profile/Tarun-Das-6</a>
SCOPUS	57190342684	<a href="https://www.scopus.com/authid/detail.uri?authorId=57190342684">https://www.scopus.com/authid/detail.uri?authorId=57190342684</a>
RESEARCHID	rid66162	<a href="https://researchid.co/admin/login-home">https://researchid.co/admin/login-home</a>
RESEARCHER (WEB OF SCIENCE)/ PUBLONS	JMF-0741-2023	<a href="https://www.webofscience.com/wos/author/record/JMF-0741-2023">https://www.webofscience.com/wos/author/record/JMF-0741-2023</a>
SSRN	6272210	<a href="https://papers.ssrn.com/sol3/cf_dev/AbsByAuth.cfm?per_id=6272210">https://papers.ssrn.com/sol3/cf_dev/AbsByAuth.cfm?per_id=6272210</a>
APID	4684	<a href="https://apid.journalslibrary.com/my-profile/">https://apid.journalslibrary.com/my-profile/</a>
LINKEDIN	83426699	<a href="https://www.linkedin.com/in/tarun-kumar-das-83426699/">https://www.linkedin.com/in/tarun-kumar-das-83426699/</a>
ACADEMIA		<a href="https://independent.academia.edu/TarunDas1">https://independent.academia.edu/TarunDas1</a>

## STATUS OF RESEARCH WORKS

Citations	165
h-index	6
i10-index	4

## PROFESSIONAL SOCIETIES MEMBERSHIPS

NAME	MEMBERSHIP CATEGORY	STATUS	ID
INDIAN SOCIETY FOR TECHNICAL EDUCATION (ISTE)	LIFE	ACTIVE FROM 06.11.23	LM - 138350
INDIAN RADIO SCIENCE SOCIETY (INRASS)	LIFE	ACTIVE FROM 19.10.23	LM1082023
WIRELESS, ANTENNA AND MICROWAVE SYMPOSIUM SOCIETY (WAMSS)	LIFE	ACTIVE FROM 31.10.23	#2015
INTERNATIONAL UNION OF RADIO SCIENCE (URSI)	LIFE	ACTIVE FROM 21.11.23	M2320651842
INDIAN SCIENCE CONGRESS ASSOCIATION (ISCA)	LIFE	ACTIVE FROM 22.11.23	L44419
INTERNATIONAL ASSOCIATION OF ELECTRICAL, ELECTRONIC AND ENERGY ENGINEERING (IAEEE)	MEMBER	ACTIVE FROM 16.10.23	71050564
INTERNATIONAL ASSOCIATION OF ENGINEERS (IAENG)	MEMBER	ACTIVE FROM 02.08.23	346201
INSTITUTE FOR ENGINEERING RESEARCH AND PUBLICATION (IFERP)	MEMBER	ACTIVE FROM 08.09.23	PROF-36833697
ASSOCIATION FOR COMPUTING MACHINERY (ACM)	MEMBER	ACTIVE FORM 08.04.24	2140125
COMPUTER SOCIETY OF INDIA (CSI)	LIFE MEMBER	ACTIVE FORM 23.07.23	2032230015
THE ASIA SOCIETY OF RESEARCHERS (ASR)	SENIOR MEMBER	ACTIVE FORM 25.02.24	R219093478

## **RESEARCH WORK SUMMARY**

In the modern-day communication world, Information and Communications Technology (ICT) enables the users to access, store, transmit, and manipulate information wirelessly. In this context, WLAN serves the key role to interconnect devices. In general, the WLAN specified by the IEEE 802.11b standard uses the 2.4 GHz (2.401-2.483 GHz) ISM band and 5 GHz (5.15-5.35 GHz) C-band, which can be used in most countries without a license for long-distance communication. Accordingly, microstrip bandpass filters have become a good choice to achieve such specifications. My research work mainly has two sections (1) design of a miniaturized folded microstrip filter (2) suppression of harmonics and enhancing the stopband rejection bandwidth. In this respect, I have performed various research works by employing different types of perturbations with optimum dimensions such as periodic rectangular grooves, Koch rectangular fractals, rectangular shaped corrugations, periodic triangular shaped corrugations, asymmetric perturbations, quasi Minkowski fractals periodic trapezoidal corrugations, and spurline. Three different filter topologies: parallel-coupled line, hairpin-line and cross-coupled have been investigated thoroughly. As an optimum result, size reduction of 60% with a wide stopband of  $4.72f_0$  and a rejection level of 33 dB have been obtained for folded parallel-coupled-line filter with trapezoidal corrugations. An optimum filter size reduction of 72% and an extended stopband upto  $4.68f_0$  with a rejection level better than 37 dB has been recorded by L-shaped spurline. As the optimum result, a compactness of 68% along with a stopband bandwidth of  $4f_0$  with a rejection level of 40 dB has been obtained by meander spurline. At present, I have continued my research works for dual-mode bandpass filters, dual and triple band filters, tunable filters for the achievement of size reduction and harmonics suppression simultaneously.

## LIST OF PUBLISHED JOURNALS

- [1] **Tarun Kumar Das** and Say an Chatterjee, “Improved second harmonic suppression in a compact coupled-line bandpass filter with triangular corrugations,” *Microsystem Technologies*, vol. 25, no. 5, pp. 1945-1956, May 2018, doi: 10.1007/s00542-018-3940-0.
- [2] **Tarun Kumar Das** and Say an Chatterjee, “Spurious harmonic suppression in compact coupled-line bandpass filter with asymmetric perturbations,” *International Journal of Electronics*, vol. 107, no. 4, pp. 576-595, Oct 2019, doi:10.1080/00207217.2019.1672801.
- [3] **Tarun Kumar Das** and Say an Chatterjee, “Compact hairpin line bandpass filter with improved spurious passbands suppression,” *International Journal of Electronics*, vol. 108, no. 8, pp. 1309-1325, August 2021, doi: 10.1080/00207217.2020.1859142.
- [4] **Tarun Kumar Das** and Say an Chatterjee, “Multi-Spurious Harmonics Suppression in Folded Hairpin Line Bandpass Filter by Meander Spur-Line,” *International Journal of RF and Microwave Computer-Aided Engineering*, vol. 31, no. 11, pp.e22858, August 2021, doi:10.1002/mmce.22858.
- [5] **Tarun Kumar Das** and Say an Chatterjee, “Harmonic Suppression by using T-shaped Spur-Line in a Compact Hairpin-Line Bandpass Filter,” *Radioengineering*, vol. 30, no. 2, pp. 296-303, June 2021, doi: 10.13164/re.2021.0296.
- [6] **Tarun Kumar Das** and Say an Chatterjee, “Spur-Line Embedded Compact Hairpin-Line Bandpass Filter for Wide Harmonic Suppression,” *International Journal of Microwave and Wireless Technologies*, vol. 14, no. 5, pp. 553-565, June 2022, doi:10.1017/S1759078721001197.
- [7] **Tarun Kumar Das**, Say an Chatterjee, Sharul Kamal Abdul Rahim, and Tan Kim Geok, “Compact High-Selectivity Wide Stopband Microstrip Cross-Coupled Bandpass Filter With Spurline,” *IEEE Access*, vol. 10, pp. 69866-69882, June 2022, doi: 10.1109/ACCESS.2022.3187408.
- [8] **Tarun Kumar Das**, and Say an Chatterjee, “Enhanced Harmonic Suppression for a Miniaturized Hairpin-Line Bandpass Filter With Meander Spurline,” *Journal of Electronics and Electrical Engineering*, vol. 3, pp. 1–21, July 2024, doi.org/10.37256/jeee.3220244469.

- [9] **Tarun Kumar Das** and Yudhajit Das, "Design of a room temperature and humidity controller using fuzzy logic. *American Journal of Engineering Research (AJER)*, vol. 2, no. 11, pp. 86-97, 2013.
- [10] **Tarun Kumar Das**, Sanchita Basu, and Ashish Srivastava. "Design of high pass filter using ota." *International Journal of Modern Communication Technologies and Research*, vol. 1, no. 7, pp. 26-32, 2013.
- [11] **Tarun Kumar Das**, Sreya Chakrabarti, "Design of a tunable active low pass filter by cmos ota and a comparative study with nmos ota with different current mirror loads, *International Journal of Electronics and Electrical Engineering*, vol. 3, no. 5, pp. 377-384, 2015, doi:10.12720/ijeee.3.5.377-384:

### **LIST OF PRESENTATIONS IN INTERNATIONAL CONFERENCES**

- [1] **Tarun Kumar Das** and Say an Chatterjee, "Design of a finite attenuation pole miniaturized S-band lowpass filter using elliptic function," *Proceedings of International Conference on Microwave, Optical and Communication Engineering (ICMOCE 2015)*, Bhubaneswar, India, pp. 404-407, 18-20 December, 2015, doi: 10.1109/ICMOCE.2015.7489778.
- [2] **Tarun Kumar Das** and Say an Chatterjee, "Design of a compact symmetrical C-Band Micro-Strip Band Pass Filter with periodic Saw tooth Grooves," *Proceedings of 2<sup>nd</sup> International Conference on Innovative Advancements in Engineering & Technology (IAET 2016)*, Jaipur, India, vol. 5, no. 1, pp. 254-259, 1-2 April, 2016.
- [3] **Tarun Kumar Das** and Say an Chatterjee, "Performance of periodic grooves on harmonic rejection in C band folded edge coupled microstrip band pass filters," *Proceedings of International Conference on Computational Science and Engineering (ICCSE 2016)*, Kolkata, India, pp. 205-209, 4-6 October, 2016, doi: 10.1201/9781315375021-40.
- [4] **Tarun Kumar Das** and Say an Chatterjee, "2<sup>nd</sup> Harmonic Suppression in Parallel-Coupled Microstrip Bandpass Filter by using Koch Fractals," *Proceedings of IEEE Annual India Conference (INDICON 2016)*, Bengaluru, India, pp. 1-6, 16-18 December, 2016, doi: 10.1109/INDICON.2016.7838919.

- [5] **Tarun Kumar Das** and Say an Chatterjee, "Spurious Harmonic Suppression in a Folded Parallel-Coupled Microstrip Bandpass Filter by using Triangular Corrugations," *Proceedings of Devices for Integrated Circuit (DevIC 2017)*, Kalyani, India, pp. 391–395, 23-24 March, 2017, doi: 10.1109/DEVIC.2017.8073977.
- [6] Say an Chatterjee, **Tarun Kumar Das**, and Bhaskar Gupta, "Harmonic Suppression in In-line Parallel-Coupled Microstrip Bandpass Filter by Minkowski Fractals," *Proceedings of 17<sup>th</sup> Mediterranean Microwave Symposium (MMS 2017)*, Marseille, France, pp. 1-4, 28-30 November, 2017, doi: 10.1109/MMS.2017.8497142.
- [7] **Tarun Kumar Das** and Say an Chatterjee, "Spurious Harmonic Suppression in a Compact Parallel-Coupled Microstrip Line Bandpass Filter using Square Shaped Corrugations," *Proceedings of URSI-RCRS 2017*, March 2017, Tirupati, India.
- [8] **Tarun Kumar Das** and Say an Chatterjee, "Harmonic Suppression in an In-line Chebyshev Bandpass Filter by Asymmetrical Perturbations," *Proceedings of IEEE MTT-S International Microwave and RF Conference (IMaRC 2017)*, Ahmedabad, India, pp. 1-5, 11-13 December, 2017, doi: 10.1109/IMaRC.2017.8449689.
- [9] **Tarun Kumar Das** and Say an Chatterjee, "Phase Velocity Compensation in Compact Coupled-Line Bandpass Filter with Square Corrugations," *Chapter of Social Transformation – Digital Way, Communications in Computer and Information Science Book Series (CCIS)Springer, Singapore, Annual Convention of the Computer Society of India, (CSI 2018)*, Kolkata, India, vol. 836, pp. 29–41, 19-21 January, 2018, doi:10.1007/978-981-13-1343-1\_4.
- [10] Say an Chatterjee and **Tarun Kumar Das**, "Multispurious Harmonic Suppression in Compact Coupled-Line Bandpass Filters by Trapezoidal Corrugations," *Proceedings of IEEE 18<sup>th</sup> Mediterranean Microwave Symposium (MMS 2018)*, Istanbul, Turkey, 31 October-2 November, 2018, pp. 149-152, doi: 10.1109/MMS.2018.8611809.
- [11] Say an Chatterjee and **Tarun Kumar Das**, "Compact Hairpin-Line Bandpass Filter with Harmonic Suppression by Periodic Grooves," *Proceedings of IEEE 19<sup>th</sup> Mediterranean Microwave Symposium (MMS 2019)*, Hammamet, Tunisia, pp. 1-4, 31 October-2 November, 2019, doi: 10.1109/MMS48040.2019.9157328.
- [12] **Tarun Kumar Das** and Say an Chatterjee, "Compact coupled-line microstrip bandpass filter with spurious passband suppression using Minkowski fractal," *Proceedings of URSI Regional*

*Conference on Radio Science (URSI-RCRS 2020)*, Varanasi, India, pp. 1-4, 12-14 February, 2020, doi: 10.23919/URSIRCRS49211.2020.9113422.

- [13] **Tarun Kumar Das** and Say an Chatterjee, "Improved Stopband Rejection in Compact Microstrip Filters by Transmission Zero Reallocation," *Proceedings of IEEE Calcutta Conference (CALCON2020)*, Kolkata, India, pp. 10-14, 28-29 February, 2020, doi: 10.1109/CALCON49167.2020.9106476.
- [14] **Tarun Kumar Das** and Say an Chatterjee, "Harmonic Suppression in a Folded Hairpin-Line Cross-Coupled Bandpass Filter by using Spur-Line," *Proceedings of IEEE Devices for Integrated Circuit (DevIC 2021)*, Kalyani, India, pp. 474-478, 19-20 May, 2021, doi: 10.1109/DevIC50843.2021.9455915.
- [15] **Tarun Kumar Das**, Pritam Paul, Suprava Das, and Say an Chatterjee, "Multi-Folded Bandpass Filter with Harmonic Suppression by Meander Spurline," *Proceedings of IEEE Annual India Conference INDICON 2022*, Guwahati, India, pp. 1-6, 19-21 December, 2021, doi: 10.1109/INDICON52576.2021.9691654.
- [16] **Tarun Kumar Das** and Say an Chatterjee, "Wide Stopband Centrally Corrugated Folded Bandpass Filter with Trapezoidal Spurline," *Proceedings of IEEE Wireless, Antenna & Microwave Symposium (WAMS 2022)*, Rourkela, India, pp. 1-5, 5-8 June, 2022, doi: 10.1109/WAMS54719.2022.9848230.
- [17] **Tarun Kumar Das**, Ayona Chakraborty, Say an Chatterjee, and Bhaskar Gupta, "Centrally Corrugated Cross-Coupled Wide Stopband Folded Bandpass Filter with Spurline," *Proceedings of 2022 Microwave Mediterranean Symposium (MMS)*, Pizzo Calabro, Italy, pp. 9-13, June 5-8, 2022, doi: 10.1109/MMS55062.2022.9825567.

**ACT AS A REVIEWER**

<b>NAME OF THE JOURNAL</b>	<b>PUBLISHER</b>	<b>IMPACT FACTOR</b>
International Journal of RF and Microwave Computer-Aided Engineering	Wiley and Hindawi	1.7
IET Wireless Sensor Systems	The Institution of Engineering and Technology	0.587
Progress in Electromagnetics Research (PIER, PIER B,C,M, Pier Letters)	PIER	6.7
Radioengineering	Proceedings of Czech and Slovak Technical Universities	0.947
International Journal of Microwave and Wireless Technologies	Cambridge University Press	1.09
Journal of Circuits, Systems, and Computers	World Scientific	1.278
Australian Journal of Electrical & Electronics Engineering	Taylor and Francis	0.223
Plos One	Plos	2.9
International Journal of Analog Integrated Circuits	JournalsPub	5.422
Qeios	Qeios Ltd	
International Journal of Creative Research Thoughts	IJ Publication	7.97
AEUE – International Journal of Electronics and Communications	ScienceDirect	3
World Journal of Engineering Research and Technology	WJERT	7.029

**LIST WORKSHOPS / SEMINARS / FACULTY DEVELOPMENT PROGRAMS****ATTENDED**

<b>Sl. No.</b>	<b>Name</b>	<b>Date/Duration</b>	<b>Organized By</b>	<b>Venue</b>	<b>Mode</b>
1	Frontiers in Electronics, Information and Communication	20.12.08	Dept. of ETCE, Jadavpur University	Kolkata	Offline
2	Optoelectronic: Materials and Devices	29.12.08-03.01.09	Indian Institute Technology, Kharagpur	Kharagpur	Offline
3	Educational Program: CASCOM'09	20.03.09-21.03.09	IEEE Communications Society, Calcutta chapter	Jadavpur University, Kolkata	Offline
4	IEEE Educational/SPAC Program: CASEDSOM 2010	13.03.10	IEEE Communications Society, Calcutta chapter	Hyatt Regency, Kolkata	Offline
5	Mission 10X	14.11.11-18.11-11	Wipro	Future Institute of Engineering and Management, Kolkata	Offline
6	Virtual Embedded System Laboratory	01.10.12	Future Institute of Engineering and Management	Future Institute of Engineering and Management	Offline
7	Recent Trends on Wireless Communication	05.02.15	Dept. of ECE, Future Institute of Engineering and Management	Future Institute of Engineering and Management	Offline
8	Recent Advances in Microwave and Antenna Technology	09.04.15-11.04.15	Dept. of ECE, Netaji Subhash Engineering College	Netaji Subhash Engineering College	Offline
9	Symposium on Signal Processing and VLSI	22.04.16	Dept. of ECE, Future Institute of Engineering and	Future Institute of	Offline

			Management	Engineering and Mgmt.	
10	Emerging Trends in Wireless Communications and Networking	16.11.16-21.11.16	Dept. of ETCE, Jadavpur University	Jadavpur University	Offline
11	Data Science Through Python	24.01.18-25.01.18	Dept. of ECE, Future Institute of Engineering and Management	Future Institute of Engineering and Management	Offline
12	Machine Learning and Embedded Systems	16.02.18	Dept. of ECE, Future Institute of Engineering and Management	Future Institute of Engineering and Management	Offline
13	Faculty Development Program for Student Induction	16.07.18-18.07.18	All India Council for Technical Education	Sister Nivedita University, Kolkata	Offline
14	Social Transformation in Smart Mode	08.03.19	Dept. of ECE, Future Institute of Engineering and Management	Future Institute of Engineering and Management	Offline
15	Design of Microwave and Millimeter-wave Filters	01.07.19-05.07.19	Indian Institute Technology, Kharagpur	Kharagpur	Offline
16	Faculty Development Program for Student Induction	18.07.19-20.07.19	All India Council for Technical Education	Sister Nivedita University, Kolkata	Offline
17	Inculcating Universal Human Values in Technical Education	02.11.20-06.11.20	All India Council for Technical Education	Kolkata	Online
18	Trends and Technologies in High Frequency Electronics	09.12.21-11.12.21	Heritage Institute of Technology	Kolkata	Offline
19	Faculty Development Program	24.08.22	The Centre of Excellence in Industry 4.0, Webel-Fujisoft-Vara	The Centre of Excellence in Industry	Offline

				4.0	
20	Intellectual Property Right	27.06.23	Future Institute of Engineering and Management	Kolkata	Offline
21	Cyber Security & Its' Applications	15.07.23-18.07.23	Dept. of IT, Future Institute of Engineering and Management	Future Institute of Engineering and Management	
22	Mathematics for Data Science: A workshop for Practitioners	24.07.23-28.07.23	VIT Bhopal University	Kolkata	Online
23	VLSI to System Design: Silicon to End Application Approach	31.07.23-04.08.23	All India Council for Technical Education and Arm Education and STMicroelectronics	Kolkata	Online
24	Neural Networks And Fuzzy Logic	21.08.23-01.09.23	National Institutes of Technical Teachers' Training & Research (NITTTR)	Chandigarh	Online
25	Deep Learning	11.09.23-15.09.23	National Institutes of Technical Teachers' Training & Research (NITTTR)	Chandigarh	Online
26	Recent Trends in Embedded Systems and IOTs	18.09.23-22.09.23	National Institutes of Technical Teachers' Training & Research (NITTTR)	Chandigarh	Online
27	Fundamentals of Machine Learning and Deep Learning	25.09.23-29.09.23	National Institutes of Technical Teachers' Training & Research (NITTTR)	Kolkata	Online
28	IoTs and Sensor Networks	09.10.23-13.10.23	National Institutes of Technical Teachers' Training & Research (NITTTR)	Chandigarh	Online
29	Applications of Artificial intelligence in Electrical and Electronics Engineering	16.10.23-20.10.23	National Institutes of Technical Teachers' Training & Research (NITTTR)	Chennai	Online
30	Future Direction in Image Processing	30.10.23-04.11.23	SRM institute of Science and Technology	Chennai	Online
31	IoT and its Applications	06.11.23-	National Institutes of Technical Teachers' Training	Chandigarh	Online

		10.11.23	& Research (NITTTR)		
32	Object Orient System Design	13.11.23- 17.11.23	National Institutes of Technical Teachers' Training & Research (NITTTR)	Chennai	Online
33	Machine Learning and Predictive Analysis using Python	20.11.23- 24.11.23	National Institutes of Technical Teachers' Training & Research (NITTTR)	Chandigarh	Online
34	Communication, Signal Processing and Advance Technologies for Next Generation Applications	20.11.23- 24.11.23	Budge Budge Institute of Technology and National Institute of Technology	Kolkata & Silchar	Online
35	ChatGPT & AI tools for Academician	27.11.23- 01.12.23	ASET College of Science & Technology	Chennai	Online
36	IoTs and Embedded Systems	15.01.24- 19.01.24	National Institutes of Technical Teachers' Training & Research (NITTTR)	Chandigarh	Online
37	Ubiquitous Technological Convergence	15.01.24- 19.01.24	Future Institute of Engineering and Management	Kolkata	Hybrid
38	Universal Human Values-II	23.01.24- 27.01.24	Sri Sai Ram Engineering College/AICTE	Chennai	Offline
39	AI/ML and Data Science for Industry 4.0 (Intermediate Level )	29.01.24- 02.02.24	National Institutes of Technical Teachers' Training & Research (NITTTR)	Chandigarh	Online
40	5G and Beyond	05.02.24- 09.02.24	National Institutes of Technical Teachers' Training & Research (NITTTR)	Chandigarh	Online
41	Wireless Networks	12.02.24- 19.02.24	National Institutes of Technical Teachers' Training & Research (NITTTR)	Chandigarh	Online
42	Advanced Technologies in Electrical Engineering	12.02.24- 19.02.24	SSN College of Engineering	Tamil Nadu	Online

**LIST OF SEMINARS CONDUCTED**

<b>Sl. No.</b>	<b>Name of the seminar</b>	<b>Date</b>	<b>Organized by</b>	<b>Place</b>	<b>Mode</b>
1	Recent Trends on Wireless Communication	05.02.15	Dept. of ECE, Future Institute of Engineering and Management	Future Institute of Engineering and Management	Offline
2	Symposium on Signal Processing and VLSI	22.04.16	Dept. of ECE, Future Institute of Engineering and Management	Future Institute of Engineering and Management	Offline
3	Data Science Through Python	24.01.18-25.01.18	Dept. of ECE, Future Institute of Engineering and Management	Future Institute of Engineering and Management	Offline
4	Machine Learning and Embedded Systems	16.02.18	Dept. of ECE, Future Institute of Engineering and Management	Future Institute of Engineering and Management	Offline
6	Social Transformation in Smart Mode	08.03.19	Dept. of ECE, Future Institute of Engineering and Management	Future Institute of Engineering and Management	Offline

## LIST OF PROJECTS GUIDED TO UG (B.TECH.) STUDENTS

<b>Sl. No.</b>	<b>Title of the Project</b>	<b>Year</b>
1	Versatile digital thermometer	2008
2	Directly digitally synthesized arbitrary sine waveform generator	2019
3	Design of an electronic lock system	2010
4	Realization of active filters using operational transconductance amplifier	2011
5	Fuzzy logic controller	2012
6	Design of a digital combination lock system	2013
7	Design of basic memory elements by BICMOS logic and comparative study with CMOS logic	2013
8	Design of a DC motor position control using Fuzzy logic with different defuzzification methods	2014
9	Design of a high frequency digital phase locked loop using CMOS	2015
10	Design of a miniaturized S-band microstrip low pass filter	2016
11	Home security system	2017
12	Study of adaptive filters and its application in echo cancellation	2017
13	Integrated home security system	2018
14	Study of adaptive filters and its application in noise cancellation	2018
15	Design of hairpin microstrip line bandpass filter	2019
16	Design of a compact coupled line microstrip bandpass filter with improved harmonic suppression	2020
17	Smart water irrigation system	2021
18	Toll tax submission system using punch card	2022
19	IoT based health monitoring system	2023

20	Password based door lock system using Python	2023
21	Calorie burnt prediction using machine learning with Python	2023
22	Online Banking with PHP & MySQL Database	2024

### **LIST OF PROJECTS GUIDED TO PG (M.SC) STUDENTS**

<b>Sl. No.</b>	<b>Title of the Project</b>	<b>Year</b>
1	Design of a C-band miniaturized parallel-coupled microstrip line bandpass filter with improved harmonic suppression with periodic rectangular grooves	2016
2	Microstrip antenna design using Sierpinski Carpet	2016
3	Design of Cross-Coupled Bandpass Filter Using Four Pole Triangular Open Loop Resonators	2022
4	Design of Compact Dual Band Bandpass Filter using Folded Step-Impedance Stub Resonators	2022
5	Dual mode microstrip resonator bandpass filter with harmonics suppression for wireless communication	2023
6	Design of a compact coupled-line microstrip bandpass filter with enhanced harmonic suppression using spurline	2023

**PAPERS TAUGHT IN WHOLE ACADEMIC CAREER (2005-2024)**

<b>Sl. No.</b>	<b>Paper name</b>	<b>Dept.</b>	<b>Year</b>	<b>No. of times</b>
1	Basic Electronics	ECE, ME,EE	1	6
2	Digital Electronics	ECE, BCA, EE	2	7
3	Circuit Theory and Networks	ECE	2	2
4	Analog and Digital Electronics	ECE, CSE, IT, EE	2	4
5	Electromagnetic Theory	ECE	2	3
6	Solid State Devices	ECE	2	3
7	Signals and Systems	ECE	2	3
8	Analog Communication Systems	ECE, AEIE	3	3
9	Digital Communication Systems	ECE	3	2
10	Telecommunication Systems	ECE	3	3
11	Digital Signal Processing	ECE	3	9
12	Control Systems	ECE	3	9
13	Information Theory and Coding	ECE	3	3
14	VLSI Circuits	ECE	3	6
15	Microwave Engineering	ECE	4	2
16	Wireless Communication	ECE	4	2
17	Mobile Communications and Networks	ECE	4	1
18	Satellite Communication	ECE	4	2
19	Neural Networks and Fuzzy Logic Control	ECE	4	3
20	Artificial Intelligence	ECE	4	1

**LABORATORIES CONDUCTED IN WHOLE ACADEMIC CAREER (2005-2024)**

<b>Sl. No.</b>	<b>Paper name</b>	<b>Dept.</b>	<b>Year</b>	<b>No. of times</b>
1	Basic Electronics	ECE, ME,EE	1	4
2	Digital Electronics	ECE, BCA, EE	2	7
3	Circuit Theory and Networks	ECE	2	2
4	Analog and Digital Electronics	ECE, CSE, IT, EE	2	4
5	Solid State Devices	ECE	2	3
6	Signals and Systems	ECE	2	3
7	Analog Communication Systems	ECE, AEIE	3	3
8	Digital Communication Systems	ECE	3	2
9	Digital Signal Processing	ECE	3	9
10	Control Systems and Instrumentation	ECE	3	9
11	CMOS VLSI Design	ECE	3	6
12	Electronics Design Workshop	ECE	3	4
13	Final Year Project Coordinator	ECE	4	3
14	Grand Viva Coordinator	ECE	4	3

**JOB RESPONSILITIES PERFORMED OTHER THAN TEACHING**

<b>Sl. No.</b>	<b>Type of Job</b>	<b>Duration of years</b>
1	University Exam Supervisor	3
2	Exam cell committee member	3
3	Coordinator of college annual fest	4
4	Coordinator of college social activities cell	8
5	Member of departmental disciplinary committee	6
6	Coordinator of fresher's welcome party of first year	3

	students	
7	Mentor of departmental events like teachers' day celebration, farewell party, reunion	12
8	Coordinator of departmental technical fest	4
9	Coordinator of Induction program for first year students	7
10	Mentor of college's official drama club	8
11	Coordinator of college painting competition	1

#### AWARDS WON

Sl. No.	Name of the award	Year	Given by
1	Edu Conclave Award	2024	Asset Journal of Management Science, Chennai
2	Best Research Paper of IEEE International conference "Devices for Integrated Circuits (DeVIC'17)	2017	Kalyani University
3	Best student award	2003	Murshidabad College of Engineering and Technology
4	Best student award	1995	Majilpur J.M.Training School, 24 Parganas (S), West Bengal

#### SEMINARS TAKEN FOR SCHOOL STUDENTS

Sl. No.	Topic of the seminar	Date	Class	Name of the school with address
1	Mobile Communication	20.08.2023	IX and X	Majilpur J. M. Training School, 24 Pgs. (S), West Bengal
2	Artificial Intelligence	21.09.2024	IX and X	

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