Biographical Profile

Dr. Ashish Bagwari
(Senior IEEE Member, USA, and FELLOW, IETE INDIA, Member IIETA Canada)
Head, Department of Electronics and Communication Engineering
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ashishbagwari@ieee.org;
ashishbagwari@wit.ac.in;

Research Interests/Expertise: Wireless Communication, Cognitive Radio networks, Mobile Adhoc networks, Sensor Network, Mobile Networks, Radio Communication, 5G Network.

Educational Qualifications:

- **Doctor of Philosophy (Ph.D.)** in Cognitive radio networks (Electronics and Communication Engineering) Engineering from Uttarakhand Technical University (State Government Technical University), Dehradun, Uttarakhand, India.
- **Post-Graduation (Mater in Technology "M.Tech.") (Gold Medalist)** in Communication System (ECE) Engineering from Graphic Era University (Deemed University), Dehradun, Uttarakhand, India.
- **Graduation (Bachelor in Technology "B.Tech.") (with Honor)** in Electronics and Communication Engineering from H.N.B. Central University (Central Government University), Srinagar Garhwal, Uttarakhand, India.

Citation Index:

1. Citations : 1276.
2. h-index : 20.
3. i10-index : 22.

https://scholar.google.co.in/citations?user=6kYT6h0AAAAJ&hl=en

https://www.scopus.com/authid/detail.uri?authorId=48761086600

https://publons.com/researcher/709219/ashishbagwari

https://orcid.org/0000-0002-6232-2772

https://www.webofscience.com/wos/author/record/1934154

Web of Science Researcher ID: AAC-6499-2020

Research Guidance/Dissertation Supervised:

1. ***Doctoral Level:* 01 scholar Awarded/Guided, and 03 scholars** (In Progress) ***(Page No. 4)***
2. ***Masters Level:* 07** students (Completed) ***(Page No. 6-7)***
3. ***Undergraduate level: 21 groups /77 students*** (Completed) ***(Page No. 7-8)***

Research Publications: 174

- Transactions: **01 ("Transactions on Computational Science XXIX, Springer", Scopus indexed)** ***(Page No. 16)***
- Patent Granted: **01 (Indian Patent)** ***(Page No. 02)***
- Patent Filled: **01 (Indian Patent)** ***(Page No. 02)***
- International / National Journals: **73 (SCI indexed: 18/ Scopus indexed: 28)** ***(Page No. 16-21)***
- **Post Ph.D.** papers published in the International Journals: **31, (SCI indexed: 10/ Scopus indexed: 12, Cumulative IF= 26.631)** ***(Page No. 16-21)***
- International/National Conferences/Seminars: **52 (Scopus indexed: 38)** ***(Page No. 22-26)***
- Magazine/Articles: **01 (SCI indexed)** ***(Page No. 26)***
- Book chapters: **14 (Scopus indexed)** ***(Page No. 26-27)***
- International/ National Letters: **03 (SCI/ Scopus indexed)** ***(Page No. 22)***
- Editor Book: **total 05, (02- CRC Publication UK, 01- IGI Publication USA, 01- CRC Publication UK, 01- AIP Publication, USA)** ***(Page No. 27-28)***
- Author Book: **total 03, (01-PHI Publication, 01-Springer Publication, 01- Khanna Publication, "Under Publication")** ***(Page No. 27-28)***
- Ph.D. Thesis evaluated: **15 No.** ***(Page No. 4-5)***
- Viva-Vice External Examiner of the Ph.D. candidates: **03 No.** ***(Page No. 4-5)***
- FDP/ STC Organized: **09 No.** ***(Page No.5-6)***
- Workshop/ Symposium organized: **21 No.** ***(Page No. 8-9)***
- Expert lecture delivered: **08 No.** ***(Page No. 9-10)***
- Expert lecture Organized: **09 No.** ***(Page No. 10)***
- International IEEE/ Conferences Organized: **04 No.** ***(Page No. 12, 13)***
- Lead Guest Editor of SCI Journal: **04 No.** ***(Page No.11)***
- Lead Guest Editor of Scopus Journal: **04 No.** ***(Page No. 11)***
- Editor of SCI Journal: **01 No.** ***(Page No. 11)***
- Academic Editor of SCI Journal: **04 No.** ***(Page No. 11)***
- Guest Editor of SCI Journal: **01 No.** ***(Page No. 11)***
- Lead Guest Editor of ESCI Journal: **02 No.** ***(Page No. 12)***
- Government Funded Research Project Handling: **01 (Submitted of cost Rs. 17.90 lac i.e. 25,000 USD)** ***(Page No. 3)***
- Foreign Visits: **01 (China in the year 2007).** ***(Page No. 11)***

Patent Granted/ Policy Documents:

- Patent entitled, "**Wireless Regional Area Network (WRAN) using Adaptive Threshold Based on Three-Bit Quantization Levels for Spectrum Sensing**", Indian Patent No. **423704,** Date of Grant **01/March/2023**Application No. **1010/KOL/2014** Date of Filling **30/September/2014**.
- Patent entitled, "**A Dual Detector Spectrum Sensing Technique for Cognitive Radio Networks**", Indian Patent filed vide Registration No. **201811013445** Dated **2018/05/04** and under process.

Experience Details:

S.No	Post held	Organization/ University	Duration		Experience in (Years and Months)
			From	To	
1	Head	Department of Electronics and Communication Engineering, Women Institute of Technology	22 October 2012	till date	11.0 years

		(State Government Engineering Institution), Dehradun, Uttarakhand, India			
2	Research Scholar	Department of Electronics and Communication Engineering, National Institute of Technology (Central Government Engineering Institution), Kurukshetra, Haryana, India	07 February 2012	20 October 2012	8 months
3	Assistant Professor	Department of Electronics and Communication Engineering, Dehradun Institute of Technology, Dehradun, Uttarakhand, India	18 August 2011	04 February 2012	< 6.0 months
4	Executive Engineer,	Telecom and Automation Department, Reliance, Mumbai, India	23 July 2007	06 July 2009	2 years

Consultancy Details:

S.No.	**Client/ Organization's Name**	**Nature of Assignment**	**Duration of Assignment**	**Amount (Rs.)**
1.	TETCOS, Bangalore	Development of codes for IEEE 802.22, Cognitive Radio module for NetSim	15-September-2018 to 15-December-2018	10,000/-= 125 USD
2.	TETCOS, LLP, Bangalore	Provided consultancy on "Development of codes for Underwater communication using cognitive radio networks with NetSim software".	01-February-2021 to 10-July-2021	55,000/-= 700 USD
3.	TETCOS, LLP, Bangalore	Provided consultancy on "Development of codes for New Security features in 5G System with NetSim software".	15-April-2022 to 30-June-2022	10,500/-= 132 USD
4.	TETCOS, LLP, Bangalore	Provided consultancy on "Development of codes for Cognitive Radio Wireless Sensor Networks with NetSim software".	10-December-2022 to 05-February-2023	10,000/-= 125 USD

5.	TETCOS, LLP, Bangalore	Provided consultancy on "Development of codes for Power saving in 5G networks for NetSim".	01-April-2023 to 10-May-2023	10,000/-= 125 USD
6.	TETCOS, LLP, Bangalore	Provided consultancy on "Simulation and analysis of Video Broadcasting over a full-stack GEO Satellite mobile communication system".	21-August-2023 to 25-October-2023	10,000/-= 120 USD

Research Projects:

S.No.	**Client/ Organisation's Name**	**Nature of Project**	**Duration of Project**	**Amount of (Rs in Lacs)**	**Status**
1.	AICTE, NPIU MHRD, Govt. of India, India	Fire alarm system for the forest areas of Uttarakhand region	02 years (June 2019 to August 2021)	17.90 lacs = 23,000 USD	Completed
2.	UCOST, Govt. of UK, Dehradun, Uttarakhand	Enhanced disaster detection and alerting system through the use of energy efficient wireless sensor networks	02 years	11.5 lacs +HRA/-= 15,000 USD	Submitted
3.	Naval Research Board, DRDO Bhawan, New Delhi	Dynamic Spectrum Sensing Techniques in Cognitive Radio Networks	02 years	18.95 lacs/-= 24,000 USD	Submitted
4.	DST, India	Study on Disaster Management in Uttarakhand	02 years	20.00 lacs/-= 25,000 USD	Submitted
5.	DES, Dehradun, Uttarakhand	Automatic alarm system for vehicles to avoid accident/injuries in Uttarakhand	02 years	17.95 lacs/-= 23,000 USD	Submitted
6.	SERB, MHRD, India	Analysis and Implementation of New Security Features in 5G System	03 years	40.85 lacs/-= 51,000 USD	Submitted
7.	DEIT, Ministry of Comm. and Information Technology, Government of India, New Delhi	Security Attacks in IoT networks and their Impact on Network Performance	03 years	51.00 lacs/-= 63,000 USD	Submitted

Ph.D. Scholars: 01 scholar Awarded/Guided, and 03 scholars *(In Progress)*

S.No.	**Scholars Name**	**Ph.D. Title**	**Affiliation**	**Year of**	**Status**

				Registration	
1.	Greeshma Arya (Enrollment No.- 130001002063)	Designing and Modeling of An Energy Efficient Clustering Hierarchical Routing Protocol For Wireless Sensor Network.	UTU, Dehradun	February 2013- May 2022	Completed
2.	Devendra Giri (Enrollment No.- 160001002103)	Realization of Analog Circuits using Active Building Blocks for Analog Signal Processing.	UTU, Dehradun	2016	Running
3.	Rahul Tiwari	Design and analysis of a compact wideband antenna using defected ground structure.	UTU, Dehradun	July, 2017	Running
4.	Sheenu Agarwal (Enrollment No.- 160001002115)	Performance improvement using efficient spectrum allocation technique for secondary user in Cognitive Radio Networks.	UTU, Dehradun	September, 2016	Running

Ph.D. Thesis Evaluated/ Viva-Vice Examiner:

1. Evaluated the Ph.D. thesis of **Dhaigude Nitin Babasaheb (Reg. No. 234310008),** title is **"Performance Evaluation and Improvement of Cognitive Radio Network Using Co-operative Relaying Technique",** in August 2023, submitted to DEPARTMENT OF ELECTRONICS AND TELECOMMUNICATION ENGINEERING, under the Faculty of Science and Technology, Savitribai Phule Pune University (Formerly University of Pune), Ganeshkhind, Pune- 411007, Maharashtra, India.
2. Evaluated the Ph.D. thesis of **E. ARAVINDRAJ (Reg. No. 20191138019),** title is **"Design and Development of Novel Fractal Structures in Microstrip Patch Antenna for Wireless Applications",** in September 2023, submitted to DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING, Pondicherry University, Pondicherry- 605014, India.
3. Evaluated the Ph.D. thesis of **R. KALAIYARASAN (Reg. No. 20192138015),** title is **"Design and Development of Efficient Rectangular Microstrip Sierpinski Carpet Fractal Antennas for 2.45 GHz / 5.8 GHz Applications",** in August 2023, submitted to DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING, Pondicherry Technological University, Pondicherry-605014, India.
4. Viva-Vice Examiner on 15-July-2023 and Evaluated the Ph.D. thesis of **Parmeet Kaur Jaggi (Reg. No. LN18PHDEC005),** title is **"Implementation of SURF Based Video Stabilization for Unmanned Application",** in March 2023, submitted to DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING, LNCT University, Bhopal, M.P., India.
5. Evaluated the Ph.D. thesis of **J.VIMAL ROSY (Reg. No. 29338),** title is **"A MACHINE LEARNING APPROACH FOR INTRUSION DETECTION IN CLOUD ENVIRONMENT",** in July 2022, submitted to PG & RESEARCH DEPARTMENT OF COMPUTER SCEINCE, St. JOSEPH'S COLLEGE (Autonomous), Tiruchirappalli-620002, India.
6. Evaluated the Ph.D. thesis of **Ashwini S. Gawarle (Reg. No. LN18PHDEC003),** title is **"Design Approach of SIP-Based GSM Gateway for VoIP Dialer",** in October 2022, submitted to DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING, LNCT University, Bhopal, M.P., India.
7. Viva-Vice Examiner on 14-December-2022 and Evaluated the Ph.D. thesis of **Vankayala Chethan Prakash (Reg. No. 20161138021),** title is **"Efficient Machine Learning Algorithms for Indoor Localization of Distributed Massive MIMO Millimeter-Wave Based 5G Communication",** in July 2022, submitted to DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING, Pondicherry Technological University, Pondicherry- 605014, India.

8. Evaluated the Ph.D. thesis of **K. AYAPPASAMY (Reg. No. 20172138001),** title is **"Improved Filter Bank Multi-Carrier Techniques for Wireless Communication Systems",** in May 2021, submitted to DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING, Pondicherry University, Pondicherry- 605014, India.
9. Evaluated the Ph.D. thesis of **A. BEATRICE DOROTHY (Reg. No. 7265),** title is **"Multi-Level Security Architecture for IoT Data using Quantum Cryptography",** in July 2020, submitted to PG & RESEARCH DEPARTMENT OF COMPUTER SCEINCE, St. JOSEPH'S COLLEGE (Autonomous), Tiruchirappalli-620002, India.
10. Evaluated the Ph.D. thesis of **P.Arunagiri,** title is **"Investigations on power saving and optimization of DRX mechanism in LTE networks",** in December 2018, submitted to DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING, Sri Chandrasekharendra Saraswathi Viswa Mahavidyalaya University, Kanchipuram, Tamilnadu-631561. India.
11. Evaluated the Ph.D. thesis of **A. ANGELPREETHI (Reg. No. 7395),** title is **"Dictionary based approach for improving the accuracy of opinion mining on big data",** in February 2019, submitted to Department of Computer Science, Bharathidasan University, Tiruchirappalli-620024, Tamil Nadu, India.
12. Evaluated the Ph.D. thesis of **R. Senthil Kumaran (Reg. No. 12REC0003),** title is **"Investigations on Enhancement of Network Lifetime in Wireless Sensor Networks",** in October 2018, submitted to DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING, Pondicherry University, Pondicherry- 605014, India.
13. Evaluated the Ph.D. thesis of **S. ARUNMOZHI (Reg. No. RM14EC35),** title is **"Novel Investigations on Relaying in Cooperative Networks for Wireless Communications",** in April 2018, submitted to DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING, Sri Chandrasekharendra Saraswathi Viswa Mahavidyalaya University, Kanchipuram, Tamilnadu- 631561, India.
14. Evaluated the Ph.D. thesis of **S. SEENUVASAMURTHI (Reg. No. 11REC0005), title is "Investigations on Noise Reduction Techniques for Analog and Digital VLSI Circuits",** in April 2018, submitted to DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING, Pondicherry University, Pondicherry- 605014, India.
15. Viva-Vice Examiner on 22-August-2017 and Evaluated the Ph.D. thesis of **G. MARY VALANTINA (Reg. No. 2010792310),** title is **"QoS BASED EVALUATION OF DATA TRANSFER PROTOCOLS IN VEHICULAR ADHOC NETWORKS",** in April 2017, submitted to FACULTY OF ELECTRONICS ENGINEERING, SATHYABAMA UNIVERSITY, Jeppiaar Nagar, Rajiv Gandhi Road, Chennai- 600119, Tamilnadu, India.

Short Term Course Program (STCP)/ Faculty Development Program (FDP) Organized/ Attended:

1. Organized One week Short Term Course Program (STCP)/ Faculty Development Program (FDP) on "Future Communication Technologies" under the TEQIP-III, MHRD scheme, from 16th to 20th July 2018, at WIT, UTU, Dehradun, Uttarakhand, India.
2. Organized One week Short Term Course Program (STCP) on "AVR Microcontroller using ATMEL STUDIO" under the TEQIP-III, MHRD scheme, from 04th to 08th August 2018, at WIT, UTU, Dehradun, Uttarakhand, India.
3. Organized One week Short Term Course Program (STCP)/ Faculty Development Program (FDP) on "Modern Research Trends and Skill developments" under the TEQIP-III, MHRD scheme, from 15th to 19th January 2019, at WIT, UTU, Dehradun, Uttarakhand, India.
4. Organized One week Short Term Course Program (STCP)/ Faculty Development Program (FDP) on "Modern Trends and skill development in Science, management and Humanities" under the TEQIP-III, MHRD scheme, from 03rd to 08th June 2019, at WIT, UTU, Dehradun, Uttarakhand, India.
5. Organized One week Short Term Course Program (STCP)/ Faculty Development Program (FDP) on "Technology advancement & skill enhancement" under the TEQIP-III, MHRD scheme, from 05th to 09th August 2019, at WIT, UTU, Dehradun, Uttarakhand, India.

6. Attended One week AICTE certificated On-line Faculty Development Program (FDP) on "Incorporating Universal Human Values in Technical Education" from 19th to 24th April 2020, conducted by UTU, Dehradun, Uttarakhand, India.
7. Attended TEQIP-III sponsored Two weeks Online Short Term Training Program on "Green Energy Technologies for Sustainable Development", from 11th to 20th June 2020, jointly organized by NIT Kurukshetra and Engineering College Bikaner, India.
8. Organized One week Short Term Course Program (STCP)/ Faculty Development Program (FDP) on "Young Professional Affinity Group, IEEE UP Section" under the TEQIP-III, MHRD scheme, from 24th to 29th August 2020, at WIT, UTU, Dehradun, Uttarakhand, India.
9. Attended 5-days Virtual International Short Term Course Program (STCP)/ Faculty Development Program (FDP) on "Tribology & Sustainability" from 24th to 28th August 2020, conducted by SRM Institute of Science and Technology, Tamilnadu, India.

Subjects Taught

1. Electronic Devices and Circuits (EDC).
2. Solid State Device Circuit (SSDC).
3. Analog Communication (AC).
4. Signal and System (SAS)
5. Mobile Ad hoc networks (MAHNET).
6. Basic Electronics (BE)
7. Analog Integrated Circuits (AIC).
8. Digital Signal Processing (DSP).
9. Mobile Computing (MC).
10. Antenna and Wave Propagation (AWP).
11. Wireless Sensor Networks (WSN).
12. Wireless Communication Systems (WCS).
13. Data Communication Networks (DCN).
14. Digital Communication (DC).
15. Spread Spectrum Systems (SSS).

Handling Labs

1. OC (Overall Controller) of all electronics and communication Labs.
2. Electronic Devices and Circuits (EDC) Lab.
3. Microwave Lab.
4. Analog Communication (AC) Lab.
5. Digital Communication (DC) Lab.
6. Analog Integrated Communication (AIC) Lab.
7. Digital Signal Processing (DSP) Lab.
8. OFC & VLSI Simulation Lab.
9. CAD of Electronics Lab.

Post Graduate/ Graduate Project Supervised

1. **One Post Graduate level student** (**Master in Technology** in **Digital Communication**) is done his M.Tech Final year Project and Dissertation/Thesis report under my supervision on **"PAPR Reduction techniques in OFDM System"** in year 2012.
2. **One Post Graduate level student** (**Master in Technology** in **Digital Communication**) is done her M.Tech Final year Project and Dissertation/Thesis report under my supervision on **"Security applications on Sensor Networks"** in year 2012.
3. **One Post Graduate level student** (**Master in Technology** in **Digital Communication**) is done her M.Tech Final year Project and Dissertation/Thesis report under my supervision on **"Improved systematic study to show the impact of CFO on the presentation of LTE Uplink"** in year 2016.

4. **One Post Graduate level student** (**Master in Technology** in **Digital Communication**) is done his M.Tech Final year Project and Dissertation/Thesis report under my supervision on **"Design and Implementation of OFDMA Modulation in 4G Wireless System"** in year 2016.
5. **One Post Graduate level student** (**Master in Technology** in **Wireless & Mobile Communication**) is done her M.Tech Final year Project and Dissertation/Thesis report under my supervision on **"Adaptive two threshold energy detection in cognitive radio"** in year 2016.
6. **One Post Graduate level student** (**Master in Technology** in **Digital Communication Engineering**) is done her M.Tech Final year Project and Dissertation/Thesis report under my supervision on **"Low Power Ripple Carry Adder using Hybrid one-bit full adder circuit"** in year 2017.
7. **One Post Graduate level student** (**Master in Technology** in **Electrical Engineering**) is done her M.Tech Final year Project and Dissertation/Thesis report under my supervision on **"Filter designing to reduce Harmonic"** in year 2017.
8. **Four Graduate level students** (**Bachelor in Technology** in **Electronics and Communication Engineering**) are made their major project & prepared report on **"The Smart Shopping Cart with Automatic Billing System"** under my guidance in year 2023.
9. **Three Graduate level students** (**Bachelor in Technology** in **Electronics and Communication Engineering**) are made their major project & prepared report on **"The Smart Home Automation using IoT and Machine Learning"** under my guidance in year 2022.
10. **Four Graduate level students** (**Bachelor in Technology** in **Electronics and Communication Engineering**) are made their major project & prepared report on **"Face Mask Detection"** under my guidance in year 2021.
11. **Four Graduate level students** (**Bachelor in Technology** in **Electronics and Communication Engineering**) are made their major project & prepared report on **"Hand Gestures to Text and Speech Converter"** under my guidance in year 2020.
12. **Three Graduate level students** (**Bachelor in Technology** in **Electronics and Communication Engineering**) are made their major project & prepared report on **"Prega Care- A Health Monitoring Device"** under my guidance in year 2020.
13. **Four Graduate level students** (**Bachelor in Technology** in **Electronics and Communication Engineering**) are made their major project & prepared report on **"Safety system for vehicles"** under my guidance in year 2019.
14. **Three Graduate level students** (**Bachelor in Technology** in **Electronics and Communication Engineering**) are made their major project & prepared report on **"Light illumination controlling system"** under my guidance in year 2018.
15. **Three Graduate level students** (**Bachelor in Technology** in **Electronics and Communication Engineering**) are made their major project & prepared report on **"Voice control security system"** under my guidance in year 2017.
16. **Three Graduate level students** (**Bachelor in Technology** in **Electronics and Communication Engineering**) are made their major project & prepared report on **"Smart city using Electronic Appliances"** under my guidance in year 2017.
17. **Four Graduate level students** (**Bachelor in Technology** in **Electronics and Communication Engineering**) are made their major project & prepared report on **"Dual-tone multi frequency (DTMF) controlled Robot"** under my guidance in year 2014.
18. **Four Graduate level students** (**Bachelor in Technology** in **Electronics and Communication Engineering**) are made their major project & prepared report on **"GSM based Notice Board"** under my guidance in year 2014.
19. **Four Graduate level students** (**Bachelor in Technology** in **Electronics and Communication Engineering**) are made their major project & prepared report on **"Home automation using Digital Control"** under my guidance in year 2014.
20. **Four Graduate level students** (**Bachelor in Technology** in **Electronics and Communication Engineering**) are made their major project & prepared report on **"Wireless Alcohol monitoring system"** under my guidance in year 2014.

21. **Four Graduate level students** (**Bachelor in Technology** in **Electronics and Communication Engineering**) are made their minor project & prepared report on **"Noise Initiated Electricity Generation"** under my guidance in year 2013.
22. **Four Graduate level students** (**Bachelor in Technology** in **Electronics and Communication Engineering**) are made their minor project & prepared report on **"Solar Based Mobile Charger"** under my guidance in year 2013.
23. **Four Graduate level students** (**Bachelor in Technology** in **Electronics and Communication Engineering**) are made their minor project & prepared report on **"Wireless Switch Using JK flip Flop"** under my guidance in year 2013.
24. **Four Graduate level students** (**Bachelor in Technology** in **Electronics and Communication Engineering**) are made their minor project & prepared report on **"Rain Alarm"** under my guidance in year 2013.
25. **Four Graduate level students** (**Bachelor in Technology** in **Applied Electronics & Instrumentation Engineering**) are done their Final year Project and Dissertation/Thesis report under my supervision on **"Wireless Powering of Household appliances"** in year 2012.
26. **Four Graduate level students** (**Bachelor in Technology** in **Electronics and Communication Engineering**) are done their Final year Project and Dissertation/Thesis report under my supervision on **"Cell Phone Based LPG Gas Detection Robot"** in year 2012.
27. **Two Graduate level students** (**Bachelor in Technology** in **Applied Electronics & Instrumentation Engineering**) are done their seminar report based on selected IEEE Transactions/Papers under my guidance in year 2012.
28. **Four Graduate level students** (**Bachelor in Technology** in **Electronics and Communication Engineering**) are made their seminar report based on selected IEEE Transactions/Papers under my guidance in year 2012.

Workshop/ Symposium Organized/ Lecture Delivered:

1. Organized workshop on "Wealth Awareness Programme" by "Advisor's Organization Mumbai, India" supported by MSME, Ministry of Finance, Government of India, for faculty members and staff members of WIT, held on 21-July-2023, at WIT, UTU, Dehradun, Uttarakhand, India.
2. Attended Five-day DST Sponsored Online workshop on "Advances in Solar Photovoltaic Emerging Materials and Technologies" from 16th to 20th February, 2022, Jointly organized by Department of Electronics & Communication Engineering, Malaviya National Institute of Technology-Jaipur (Rajasthan) & Birla Institute of Applied Sciences-Bhimtal (Uttarakhand), India.
3. Attended National webinar on "Use of modern techniques in Teaching Learning and E-Library Management" held on 26th March 2022, organized by Govt. P.G. College, Alirajpur (M.P.) under the sponsorship of the Department of Higher Education, Govt of Madhya Pradesh.
4. Attended National webinar on "Establishing new teaching learning skills & methodologies amidst covid-19 pandemics" held on 27th October 2020, organized by Uttarakhand Science Education & Research Centre (USERC), Dehradun, Uttarakhand, India.
5. Organized IEEE young professional national symposium on "Big Data Analysis & IoT" under the TEQIP-III, MHRD scheme, held on 21st April 2018, at WIT, UTU, Dehradun, Uttarakhand, India.
6. Organized workshop on "Basic Arduino" by "M/S Leading Edge – ESTC ACEL, India" under the TEQIP-III, MHRD scheme, for the Department of Electronics and Communication Engineering WIT, held on 09th -11th September 2019, at WIT, UTU, Dehradun, Uttarakhand, India.
7. Organized workshop on "Track the Satellite" by "Prof. Kamal Kumar Sharma (HOD, ECE) & Dr. Daljeet Singh (Asst. Prof. ECE) from Lovely Professional University, India" under the TEQIP-III, MHRD scheme, for the Department of Electronics and Communication Engineering WIT, held on 12th- 13th September 2019, at WIT, UTU, Dehradun, Uttarakhand, India.
8. Organized workshop on "Solid Works" by "M/S Insergo Technologies Pvt. Ltd., India" under the TEQIP-III, MHRD scheme, for the Department of Electronics and Communication Engineering WIT, held on 22nd– 23rd April 2019, at WIT, UTU, Dehradun, Uttarakhand, India.

9. Organized workshop on "Matlab: An Introduction" by "M/S LeitEducom Private Limited, India" under the TEQIP-III, MHRD scheme, for the Department of Electronics and Communication Engineering WIT, held on 13th-14th February 2019, at WIT, UTU, Dehradun, Uttarakhand, India.
10. Organized workshop on "Robotics Technology" by "M/S CETPA Infotech Pvt. Ltd, India" under the TEQIP-III, MHRD scheme, for the Department of Electronics and Communication Engineering WIT, held on 15th-16th March 2019, at WIT, UTU, Dehradun, Uttarakhand, India.
11. Organized workshop on "Advanced Optical fiber" by "Mr. Shiv Kumar from Benchmark, Chennai, India" under the TEQIP-III, MHRD scheme, for the Department of Electronics and Communication Engineering WIT, held on 25th October 2018, at WIT, UTU, Dehradun, Uttarakhand, India.
12. Organized workshop on "How to start your own technology: Startup" by "M/S Euclid labs, India" under the TEQIP-III, MHRD scheme, for the Department of Electronics and Communication Engineering, Electrical Engineering, and Computer Science & Engineering WIT, held on 29th-30th March 2019, at WIT, UTU, Dehradun, Uttarakhand, India.
13. Organized workshop on "Microwind tool VLSI & CMOS Lab" by "Mr. Shrikant Atkarne, India" under the TEQIP-III, MHRD scheme, for the Department of Electronics and Communication Engineering WIT, held on 24th August 2018, at WIT, UTU, Dehradun, Uttarakhand, India.
14. Organized workshop on "Proteus VSM Software" by "Mr. Anand Jambholkar, Managing Director, Cybermotion Technologies Pvt. Ltd., Hyderabad, India" under the TEQIP-III, MHRD scheme, for the Department of Electronics and Communication Engineering, Electrical Engineering, and Computer Science & Engineering WIT, held on 07th April 2018, at WIT, UTU, Dehradun, Uttarakhand, India.
15. Organized workshop on "Outcome Based Education (OBE)" by "Dr. Vitthal S. Bandal, Pricnipal at Govt. Polytechnic Karad, Maharashtra, India" under the TEQIP-III, MHRD scheme, for all engineering branches, held on 08th-09th March 2018, at WIT, UTU, Dehradun, Uttarakhand, India.
16. Organized workshop on "Internet of Things" by "DUCAT Pvt. Ltd. Noida" under the TEQIP-III, MHRD scheme, for the Department of Electronics and Communication Engineering WIT, held on 17th -19th November 2017, at WIT, UTU, Dehradun, Uttarakhand, India.
17. Organized workshop on ".Net, and Web Designing" by "DUCAT Pvt. Ltd. Noida" under the TEQIP-III, MHRD scheme, for the Department of Computer Science and Engineering WIT, held on 17th -19th November 2017, at WIT, UTU, Dehradun, Uttarakhand, India.
18. Organized workshop on "MATLAB- Image Processing" by "DUCAT Pvt. Ltd. Noida" under the TEQIP-III, MHRD scheme, for the Department of Electrical Engineering WIT, held on 25th -26th November 2017, at WIT, UTU, Dehradun, Uttarakhand, India.
19. Organized workshop on "Workshop on MATLAB and Embedded Systems" by "DUCAT Pvt. Ltd. Noida" organized by Department of Electronics and Communication Engineering WIT, held on 2nd-3rd April 2017, at WIT, UTU, Dehradun, Uttarakhand, India.
20. Organized workshop on "Workshop on Arduino Microcontroller" by "LEADING EDGE-ESTC ACEL" organized by Department of Electronics and Communication Engineering WIT, held on 17th -18th March 2017, at WIT, UTU, Dehradun, Uttarakhand, India.
21. Invited as a Speaker on "Workshop on MATLAB" organized by Department of Electronics and Communication Engineering THDCIHET, held on 06-07 May 2016, at THDCIHET, Bhagirathipuram, Tehri, Uttarakhand, India.
22. Member of organizing committee of One day Workshop on Intellectual Property Rights (IPR): In-house Patent filling, organized by Uttarakhand Technical University (UTU), Dehradun, on 24th-August-2015.

Expert Lectures Organized/ Delivered:

1. Delivered a talk as an expert lecture on "5G Networks- Spectrum Sensing Technique" in terms of Open Dais lectures program hosted by Cloud-Oriented Solutions and Modelling (COSM) laboratory of faculty of Computer Technologies and Control, ITMO University (Russia Government University), Saint-Petersburg, Russia on 1st December 2022. (https://youtu.be/NtH74fX7sYE)
2. Delivered a talk on "Optimal Techniques for Cognitive Radio Networks" as a "Keynote Speaker" for Two-weeks Short Term Course (STC) on "Key Enabling Technologies for 5G Communications and Beyond", from 2nd August - 14th August 2021, Organized by: Electronics & Communication

Engineering Department, Jaypee Institute of Information Technology, Sector- 62, Noida, Uttar Pradesh, India.

3. Delivered a talk on "Reliable Spectrum Sensing Technique for 5G networks" as a "Keynote Speaker" for Two-weeks Summer School on "Industry4.0: Technological and security aspects", IEEE Sponsored from 9th August – 21st August 2021, Organized by: Computer Science and Engineering Department, Jaypee Institute of Information Technology, Sector- 62, Noida, Uttar Pradesh, India.
4. Delivered a talk on "Optimal Techniques for Spectrum Sensing in CRNs" as a "Keynote Speaker" for "3rd International World Conference on Innovations in Management, Science and Engineering (WCISE-2020), on 21-22 August, 2020 at Shivalik College of Engineering, Dehradun, Uttarakhand, India.
5. Delivered a talk on "Use of Information & Communication Technology (ICT) Tools in the Engineering Education" as a "Keynote Speaker" for One-week Faculty Development Program (FDP) on "Use of ICT in Engineering Education", AICTE-ISTE sponsored Online Refresher/Induction Programme from 7th April- 13th April 2021, Organized by: Electronics & Communication Engineering Department, Maharaja Surajmal Institute of Technology, GGSIPU, New Delhi, India.
6. Delivered a talk as an expert lecture on "Various Sensing Techniques for 5G" organized by Department of Electronics and Communication Engineering, held on 21st December 2020, at IT Gopeshwar, Uttarakhand, India.
7. Delivered a talk on "Robust Sensing Techniques for Spectrum Sensing in CRNs" as a "Keynote Speaker" for Five Days Short-Term Training Program (STTP) on Intelligent System and Networks (ISN-2020), on 31st August- 04th September 2020, under Twinning Program TEQIP-III jointly organized by Department of Electronics & Communication Engg, SLIET Longowal & Department of Electronics Engineering, NIT Uttarakhand.
8. Delivered as an expert lecture on "Applications of Optoelectronic Devices" organized by Department of Electronics and Communication Engineering, National Institute of Technology (NIT), Uttarakhand, held on 27th March 2020, at NIT Uttarakhand Campus, Uttarakhand, India.
9. Organized Expert lecture on "Field Effect Transistor" by "Dr. Tajinder Singh Arora from NIT Uttarakhand, India" under the TEQIP-III, MHRD scheme, for the Department of Electronics and Communication Engineering, held on 18th November 2019, at WIT, UTU, Dehradun, Uttarakhand, India.
10. Organized Expert lecture on "Development in IOT" by "Er. Utsav Nayyar from Output Technology, Chandigarh, India" under the TEQIP-III, MHRD scheme, for the Department of Electronics and Communication Engineering, held on 17th September 2019, at WIT, UTU, Dehradun, Uttarakhand, India.
11. Organized Expert lecture on "Electronics Instruments and Measurement" by "Dr. Bhoola Jha from GBPEC, Pauri, India" under the TEQIP-III, MHRD scheme, for the Department of Electronics and Communication Engineering, held on 07th September 2019, at WIT, UTU, Dehradun, Uttarakhand, India.
12. Organized Expert lecture on "Optical Communication and its application" by "Mrs. Kanchan Nautiyal from IBI Group, Gurgaon, India" under the TEQIP-III, MHRD scheme, for the Department of Electronics and Communication Engineering, held on 07th September 2019, at WIT, UTU, Dehradun, Uttarakhand, India.
13. Organized Expert lecture on "Funding Opportunities for sponsored research projects by DRDO" by "Dr. S.K. Thakur from Consulting Member IDST/DRDO, Delhi, India" under the TEQIP-III, MHRD scheme, for all the engineering branches of WIT, held on 03rd November 2018, at WIT, UTU, Dehradun, Uttarakhand, India.
14. Organized Expert lecture on "Low Power Memory Organization" by "Mr. Tarun Jha from EUCLID Labs, India" under the TEQIP-III, MHRD scheme, for the Department of Electronics and Communication Engineering, held on 27th & 28th April 2018, at WIT, UTU, Dehradun, Uttarakhand, India.
15. Organized Expert lecture on "Optical Communication" by "Mr. Utsav Nayyar and Mr. Chandan Kumar Singh from Advance Tech India Pvt. Ltd., Mohali, India" under the TEQIP-III, MHRD scheme, for the Department of Electronics and Communication Engineering, held on 26th April 2018, at WIT, UTU, Dehradun, Uttarakhand, India.
16. Organized Expert lecture on "Artificial Intelligence in Corporate Business Strategies" by "Dr. Upasana Geetanjali Singh from Durban, South Africa" under the TEQIP-III, MHRD scheme, for the Department of Electronics and Communication Engineering, held on 27th March 2018, at WIT, UTU, Dehradun, Uttarakhand, India.

17. Organized Expert lecture on "Revolution in Electrical Engineering and Motivational talk" by "Dr. D.P. Kothari from VNIT, Nagpur" under the TEQIP-III, MHRD scheme, for all engineering branches, held on 8th March 2018, at WIT, UTU, Dehradun, Uttarakhand, India.

Foreign Visits:

1. **Visited Wuhan (China) in the year 2007,** during SDH technologies (Ethernet over SDH) and Network Management System (NMS) Industrial Training certified by WRI (Wuhan Research Institute– China.

Industrial Training:

1. **Industrial training on "Embedded System & IoT for Wireless Networks"** between February 14, 2022, to February 28, 2022, at ROBOTRONIX INDIA, Indore, India.

Awards /Facilitations/Distinctions:

1. Received "Best Teacher Award-2023" from Veer Madho Singh Bhandari Uttarakhand Technical University (State Government Technical University), Dehradun on September 05, 2023.
2. Received "Dr. A.P.J. Abdul Kalam Life Time Achievement National Award-2022" from National Institute for Socio Economic Development (NISED), Bangalore, India in June 2022.
3. Received "Outstanding Scientist Award-2021" by the VDGOOD Technology, Chennai, India on 12th November 2021.
4. **"Academic Editor" of "International Journal of Distributed Sensor Networks", Sage-Hindawi Publication, UK, SCI/ Scopus indexed Journal (Impact Factor-1.938) for the year 2022-23 and life time.**
   https://www.hindawi.com/journals/dsn/editors/
5. **"Academic Editor" of "International Journal of Wireless Communications and Mobile Computing", Wiley-Hindawi, UK, Q2-SCI/ Scopus indexed Journal (Impact Factor-2.336) for the year 2022-23.**

   https://www.hindawi.com/journals/wcmc/editors/
6. **"Academic Editor" of "International Journal of RF and Microwave Computer-Aided Engineering", Wiley-Hindawi Publication, UK, SCI/ Scopus indexed Journal (Impact Factor-2.46) for the year 2021-22 and life time.**
   https://www.hindawi.com/journals/ijmce/editors/
   https://onlinelibrary.wiley.com/journal/1099047X
7. "**Academic Editor" of "International Journal of Mobile Information Systems", Hindawi Publication, UK, Q2-SCI/ Scopus indexed Journal (Impact Factor-1.802) for the year 2021-22 and life time.**
   https://www.hindawi.com/journals/misy/editors/
8. Become the **"Lead Guest Editor"** for a special issue "Advancements in Wireless Technologies using Artificial Intelligence, Machine Learning, and Deep Learning" of "International Journal of International Journal of Electrical and Electronics Research (IJEER)", **Q4-Scopus indexed Journal (Impact Factor-1.67) for the year 2023-24.**
   https://ijeer.forexjournal.co.in/special-issue-awt.php
9. Become the **"Editor"** of "International Journal of Traitement du Signal (IJTS)", IIETA, SCI indexed Journal (Impact Factor-1.9).
   https://iieta.org/Journals/ts/Editorial%20Board

10. Become the **"Lead Guest Editor"** for a special issue "IoT and Machine Learning Based Application for Biomedical Signal Processing and Imaging" of "International Journal of Traitement du Signal (IJTS)", IIETA, SCI indexed Journal (Impact Factor-1.9) for the year 2022-23.
    https://iieta.org/Journals/TS/news/14698
11. Become the **"Lead Guest Editor"** for a special issue "Emerging Trends in Computational Intelligence, Networks Technologies, and Wireless Communication Systems" of "International Journal of Mathematical Modelling of Engineering Problems (IJMMEP)", IIETA, Q4-Scopus indexed Journal (Impact Factor-1.8) for the year 2022-23.
    https://iieta.org/Journals/MMEP/news/14670
12. Become the **"Lead Guest Editor"** for a special issue "Technological Advancement in Wireless Sensor Networks and its scope in Industry 4.0 IoT" of "International Journal of SN Applied Sciences", Springer, Q2-Scopus indexed Journal (Impact Factor-2.88) for the year 2022-23.
    https://link.springer.com/collections/bieiiedgga
13. Become the **"Lead Guest Editor"** for a special issue "Emerging Trends in Computational Intelligence, Networks Technologies, and Wireless Communication Systems" of "International Journal of Electrical and Electronic Engineering & Telecommunications (IJEETC)", Q4-Scopus indexed Journal (Impact Factor-1.455) for the year 2022-23.
    http://www.ijeetc.com/index.php?m=content&c=index&a=lists&catid=229
14. Become the **"Lead Guest Editor"** for a special issue "Mobile Computing assisted by Artificial Intelligent for 5G/ 6G/ Radio Communication" of "International Journal of International Journal of Electrical and Electronics Research (IJEER)", **Q4-Scopus indexed Journal (Impact Factor-1.67) for the year 2022-23.**
    https://ijeer.forexjournal.co.in/special-issue-ai-5G-6G-Radio-communication.php#
    https://ijeer.forexjournal.co.in/archive/volume-11/mobile-computing-ai-for-rcom.php
15. Become the **"Lead Guest Editor"** for a special issue "Applications of Cognitive Radio in Emerging Technologies" of "International Journal of Distributed Sensor Networks", SAGE Publication, UK, **Q2-SCI/ Scopus indexed Journal (Impact Factor-1.640) for the year 2021-22.**
    https://journals.sagepub.com/page/dsn/collections/special-issues/applications-of-cognitive-radio-in-emerging-technologies
16. Become the **"Lead Guest Editor"** for a special issue "Radio Networks for new Disruptive Digital Services in Fourth Industrial Revolution" of "CMC-Computers, Materials & Continua Journal", Tech Science Press, USA, **SCI indexed Journal (Q1-Impact Factor-4.89) for the year 2021-22.**
    https://techscience.com/cmc/special_detail/radio-networks
17. Become the **"Guest Editor"** for a special issue "AI and Security Application in Green Energy and Renewable Power" of "Applied Sciences", MDPI Publication, Switzerland, **SCI indexed Journal (Q2-Impact Factor-2.679) for the year 2021-22.**
    https://www.mdpi.com/journal/applsci/special_issues/AI_security_green_energy_renewable_power
18. Become the "**Lead Guest Editor**" for a special issue "Cognitive Radio as Futuristic Technology for Cloud Computing, Mobile Computations, Big Data, and Blockchain Techniques" of "Frontiers In Computer Science", Switzerland, ESCI indexed Journal for the year 2021-22.
    https://www.frontiersin.org/research-topics/24880/cognitive-radio-as-futuristic-technology-for-cloud-computing-mobile-computations-big-data-and-blockc
19. Board of Studies (BoS) Member of Uttaranchal University (UIT), Dehradun, for the departments of Electronics & Communication Engineering for the academic session 2021-22.
20. Board of Studies (BoS) Member of Uttarakhand Technical University, Dehradun, for the departments of Electronics & Communication Engineering for the academic session 2020-21.
21. Board of Studies (BoS) Member of Dr. B.A.Technological University, Lonere, Maharashtra, for the departments of Electronics & Telecommunication Engineering, and Electronics Engineering & Biomedical Engineering for the academic session 2019-20, 2020-21.
22. Organizing Secretary of "4th International World Conference on Innovations in Management, Science and Engineering (WCISE-2021), held on August 28-29, at Tula's Institute, Uttarakhand, India.

https://wcise.co.in/committee

23. Certified SWAYAM course on "Digital Transformation in Teaching Learning Process" August 17th to August 31st, 2020, course offered by Indian Institute of Technology, Bombay, India.
24. Delivered a talk as a **"Keynote Speaker**" for Two-weeks Short Term Course (STC) on "Key Enabling Technologies for 5G Communications and Beyond", from 2nd August - 14th August 2021, Organized by: Electronics & Communication Engineering Department, Jaypee Institute of Information Technology, Sector- 62, Noida, Uttar Pradesh, India.
25. Delivered a talk as a **"Keynote Speaker"** for Two-weeks Summer School on "Industry4.0: Technological and security aspects", IEEE Sponsored from 9th August – 21st August 2021, Organized by: Computer Science and Engineering Department, Jaypee Institute of Information Technology, Sector- 62, Noida, Uttar Pradesh, India.
26. Delivered a talk as a **"Keynote Speaker"** for One-week Faculty Development Program (FDP) on "Use of ICT in Engineering Education", AICTE-ISTE sponsored Online Refresher/Induction Programme from 7th April- 13th April 2021, Organized by: Electronics & Communication Engineering Department, Maharaja Surajmal Institute of Technology, GGSIPU, New Delhi, India.
27. Delivered a talk as an **expert lecture** on "Robust Sensing Techniques for Spectrum Sensing in CRNs" organized by Department of Electronics and Communication Engineering, held on 21st December 2020, at IT Gopeshwar, Uttarakhand, India.
28. Delivered a talk as a **"Keynote Speaker"** for Five Days Short-Term Training Program (STTP) on Intelligent System and Networks (ISN-2020), on 31st August- 04th September 2020, under Twinning Program TEQIP-III jointly organized by Department of Electronics & Communication Engg, SLIET Longowal & Department of Electronics Engineering, NIT Uttarakhand.
29. **Technical Program Committee (TPC)** of the conference in 14th International Conference on Computational Intelligence and Communication Networks (CICN 2022), held on 04-06 December 2022, at PMU, Kingdom of Saudi Arebia.
30. **General Chair** of the International Conference on Emerging Wireless Technologies and Sciences 2023 "(ICEWTS-2023)" organized by ITMO University, Russia: 07th-08th May, 2023, with Scopus indexed journals. (https://icewts.aairlab.com)
31. **General Chair** of the International Conference on Wireless Technologies, Networks and Science-2022 (ICWTNS-2022) organized by Al-Balqa University, Jordan and AAIR Lab, India: 06-07 October, 2022, proceeding will be published by AIP Conference Proceeding USA, (Scopus, ISI, Web of Science, EI Compendex indexing). (https://icwtns.aairlab.com)
32. **SESSION CHAIRS** for chairing the Technical Sessions during the conference in 12th International Conference on Computational Intelligence and Communication Networks (CICN 2023), held on 08-09 April 2023, at TIT, Bhopal, India.
33. **SESSION CHAIRS** for chairing the Technical Sessions during the conference in the International Conference on Innovations in Smart Technology, Advanced Materials And Communication Engineering "(ISTAMCE-2021)", held on 9th June 2021, Amity university, Gwalior, M.P., India.
34. **SESSION CHAIRS** for chairing the Technical Sessions during the conference in 1st International Conference on Cutting-Edge Technologies in Computing and Communication Engineering (IC4E-2020), held on 06-07 November 2020, at National Institute of Technology, Kurukshetra, India.
35. **SESSION CHAIRS** for chairing the Technical Sessions during the conference in 10th International Conference on Communication Systems and Network Technologies (CSNT 2021), held on 24-25 April 2021, at Oriental Institute of Science and Technology, Bhopal, M.P., India.
36. **SESSION CHAIRS** for chairing the Technical Sessions during the conference in 12th International Conference on Communication Systems and Network Technologies (CSNT 2021), held on 24-25 April 2021, at Oriental Institute of Science and Technology, Bhopal, M.P., India.
37. Invitation as a "**Proctor Coordinator"** in the two week online faculty development programme (FDP) on "Data Science for All" jointly organized by Electronics & ICT Academies at NIT Patna held from 27th July, 2020 – 08th August, 2020 under the "Scheme of financial assistance for setting

up of Electronics and ICT Academies" by the Ministry of Electronics and Information Technology (MeitY), Government of India.

38. Invitation for the Post Doctoral Fellowship (PDF) Programme Candidate Selection Interview (Advanced Research Studies in Science/Technology, Period of Study-2 Years) as a **Interview Panel Member** on 06/02/2021 from 2.30 PM-4.30 PM in online using Webex Meeting Platform from College of Computer Science and Information Science, Srinivas University, Mangaluru, Karnataka, India.
39. **SESSION CHAIRS** for chairing the Technical Sessions during the conference in 12th International Conference on Computational Intelligence and Communication Networks (CICN 2020), held on 25-26 September 2020, at BIAS, Bhimtal, Uttarakhand, India.
40. Invitation as a "**Keynote Speaker and Session Chair"** for "3rd International World Conference on Innovations in Management, Science and Engineering (WCISE-2020), on August 21-22, at Shivalik College of Engineering, Dehradun, Uttarakhand, India.
41. **SESSION CHAIRS** for chairing the Technical Sessions during the conference in Ninth IEEE International Conference on Communication Systems and Network Technologies (CSNT-2020), held on 10-12 April 2020, at Gwalior, India.
42. **Member of Inspection committee** for B.Tech course affiliation, formed by UTU Dehradun for Doon Institute of Engineering & Technology (D.I.E.T.) Rishikesh for the academic year 2019-20.
43. Prof. P.M. Khodke, CPA, NPIU, provided certificate of appreciation for the TEQIP-III project running in the WIT for the year 2017-18.
44. **SESSION CHAIRS** for chairing the Technical Sessions during the conference in Ninth IEEE International Conference on Communication Systems and Network Technologies (CSNT-2020), held on 10-12 April 2020, at Gwalior, India.
45. Member of screening committee for TEQIP-III member selection, formed by Uttarakhand Technical University, Dehradun, Uttarakhand.
46. **Judge** on "Seminar on Green Technologies" during "Abhiyantrotsav 2016"organized by IEEE Student Branch of Uttarakhand Technical University, Dehradun, held on 28th April 2016, at UTU, Dehradun, Uttarakhand, India.
47. **Judge** on "SOCIO HACKATHON" during "First Athletic and Cultural Event-2023"organized by Veer Madho Singh Bhandari, Uttarakhand Technical University, Dehradun, held on 03-04 April 2023, at UTU, Dehradun, Uttarakhand, India.
48. **Organizing Secretary** of IEEE International WITCON-ECE-2019 held on 22-23 November 2019, organized by WIT, UTU, Dehradun, Uttarakhand.
    https://witconece.org/

    https://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=9092911

    https://easychair.org/cfp/WITCONECE-2019
49. Project Coordinator of Technical Education Quality Improvement Programme (TEQIP-III) of Ministry of Human Resource and Development (MHRD), Government of India, funded by World Bank from September 2017-2022.
50. **Organizing Secretary** of IEEE International WIE Conference on Electrical and Computer Engineering (IEEE WIECON-ECE-2017) held on 18-19 December 2017, organized by WIT, UTU, Dehradun, Uttarakhand.

    https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=8468903

    https://ieeexplore.ieee.org/document/8468903/metrics#metrics

    https://wiecon-ece.org/ieee-wiecon-ece-2017/
51. **General Chair of** "International Online Conference on Research in Science, Engineering and Management\" (**IOCRSEM – 2014**), held on 20th August 2014, ISBN: 978-93-5174-703-1.
52. **Committee member** of Screening Test/interview for the post of JRF in DRDO, Dehradun, Uttarakhand in January 2017.

53. Received "**Best Department Award 2015-2016**" from "Shri Satrughna Singh ji" Chief Secretory Uttarakhand Government, in WIT, UTU as a H.O.D. ECE.
54. **SESSION CHAIRS** for chairing the Technical Sessions during the conference in Sixth IEEE International Conference on Communication Systems and Network Technologies (CSNT-2016), held on 05-07 March 2016, at Chitkara University, Chandigarh, India.
55. Received "**Corps of Electrical and Mechanical Engineers' Prize**" from The Institution of Engineers, INDIA (IEI) at the Prize Distribution Ceremony of the 30th Indian Engineering Congress held at Pragjyoti-ITA Centre for Performing Arts, Machkhowa, Guwahati 781009, Assam on December 18-20, 2015.
56. **Best Project Guide Award – 2015.**
57. **Best faculty of WIT (Women Institute of Technology) – 2013, 2014.**
58. **Question paper made for Uttarakhand Adhinasth Sewa Chayan Ayog (Uttarakhand Subordinate Service Selection Commission "UKSSSC-2018").**
59. **Member of screening committee** for TEQIP-III member selection, formed by Uttarakhand Technical University, Dehradun, Uttarakhand.

Membership of Professional Bodies/ Societies:

1. The Senior member of IEEE USA (Institute of Electrical and Electronics Engineers) (**91152428**).
2. The Fellow of IETE India (Institute of Electronics and Telecommunication Engineers) (**F-235909**).
3. The Member of IIETA Canada (International Information and Engineering Technology Association) (**10133**).
4. The Professional Member of ACM (Association for Computing Machinery) (**3638058**).
5. The Member of MIR Labs (Machine Intelligence Research Laboratory Society) (**MIRFAO100000079**).
6. The Member of IAENG (International Association of Engineers) (**119370**).
7. The Global Member of ISOC (Internet Society) (**484119**).
8. The Member of International Association of Computer Science and Information Technology (IACSIT) (**80346201**).

Member Editorial board/Reviewer/Conference /Chair:

1. Become the "**Lead Guest Editor"** for a special issue "Radio Networks for new Disruptive Digital Services in Fourth Industrial Revolution" of "CMC-Computers, Materials & Continua Journal", Tech Science Press, USA, SCI indexed Journal (Impact Factor-4.89) for the year 2021-22.
2. Lead Guest Editor a **Special Issue for International Journal of Computer Networks and Communications (IJCNC), Hindawi Publication**.
3. Editor of **International Journal of Frontiers of Mechatronical Engineering (FME).**
4. **Associate Editorial Board Member of our journal "The Open Artificial Intelligence Journal", Bentham Publication.**
5. **Editor** of "International Journal of Traitement du Signal (IJTS)", IIETA, SCI indexed Journal (Impact Factor-1.9). https://iieta.org/Journals/ts/Editorial%20Board
6. Editor of **International Journal of Wireless Communication Technology (WCT).**
7. Editor of **INTERNATIONAL SOCIETY OF THESIS PUBLICATION (ISTP).**
8. Editor of **International Journal of Advanced Technology and Engineering Research (IJATER).**
9. Editor of **International Journal of Research in Electrical and Electronics Engineering (JREEE).**
10. Editor of **International Journal of Computer Studies and Research (JCSR).**
11. Editor of **International Journal of Network Management and Security (JNMS).**
12. Editor of Proceeding of **International Online Conference on Research in Science, Engineering and Management-2014 (IOCRSEM-2014).**
13. Member of **National Advisory committee of NATIONAL CONFERENCE ON ENERGY COMMUNICATION & INTELLIGENCE COMPUTING (NCECIC 2017, 2018).**
14. Member of **National Advisory committee of National Conference on communication systems and advanced computing (NCCAC-2016).**

15. Advisor of **International Journal of Computing, Communications and Networking (IJCCN). ISSN: 2319-2720 with Impact Factor: 0.465.**
16. Reviewer of **Allied Academies Journals (SCI journal).**
17. Reviewer **IEEE Transactions on Cognitive Communications and Networking.**
18. Reviewer of **National Academy Science Letters.**
19. Reviewer of **IEEE Transactions on Industrial Informatics**.
20. Reviewer of **International Seminar on Application for Technology of Information and Communication (iSemantic), September 16 to 17, 2023 at Semarang, Indonesia.**
21. Reviewer **IEEE Technology and Engineering Management Society (TEMS) publications Transactions on Engineering Management or Engineering Management Review.**
22. Reviewer for the Elsevier Editorial System (EES) of **International Journal of Electronics and Communications.**
23. Reviewer of **British Journal of Mathematics & Computer Science.**
24. Reviewer **IEEE Sensors Journal.**
25. Review of **IEEE Access.**
26. Review of International **Journal of Nano and Biomaterials (IJNBM) published by Inderscience Publishers.**
27. Reviewer of **International Journal of Communication Networks and Distributed Systems published by Inderscience Publishers.**
28. Reviewer **Journal of Communications and Information Networks (JCIN).**
29. Reviewer **IET Communications Journal.**
30. Reviewer of **International Journal of Internet Technology (JIT).**
31. Reviewer of **International Journal of Numerical Modeling: Electronic Networks, Devices and Fields.**
32. Reviewer of **International Journal of Electronics (Taylor and Francis).**
33. Reviewer of **International Journal for Computation and Mathematics in Electrical and Electronic Engineering (COMPEL).**
34. Reviewer of **International Journal of Future Generation Computer Systems (Elsevier).**
35. Reviewer of **International Journal of Physical Communication (Elsevier).**
36. Reviewer of **IEEE Canadian Journal of Electrical and Computer Engineering.**
37. Reviewer of **IEEE Transactions on Communications.**
38. Reviewer of **KSII Transactions on Internet and Information Systems.**
39. Reviewer of **IEEE Wireless Communications Letters.**
40. Reviewer of **International Journal of Electronics and Communications (Elsevier).**
41. Reviewer of **IEEE Communications Letters.**
42. Reviewer of **Springer Wireless Personal Communications Journal.**
43. Reviewer of **Springer Wireless Networks Journal.**
44. Reviewer of **Transactions on Emerging Telecommunications Technologies (Wiley-Blackwell).**
45. Reviewer of **International Journal of Communication Systems (IJCS- Elsevier).**

List of Publications:

International Transactions Published / Communicated

1. J Kanti, G.S. Tomar, and Ashish Bagwari, "A Novel Multiple Antennas Based Centralized Spectrum Sensing Technique", "Transactions on Computational Science XXIX, LNCS", Springer-Verlag GmbH Germany, Vol. 10220, No. 1, pp 64-85, March 2017***, ISSN: 1866***-4733, ***ISSN: 1866***-4741 (electronic). **(ISI, Scopus indexed).** (IF – 0.75).

International Journals Published / Communicated

1. Greeshma Arya, Ashish Bagwari, Hiteshi Saini1, Prachi Thakur, Ciro Rodriguez, and Pedro Lezama, "Explainable AI for Enhanced Interpretation of Liver Cirrhosis Biomarkers", "IEEE Access", Vol. 11, No. 2023, pp 123729 - 123741, 02 November 2023, Print ISSN: 2169-3536,

Online ISSN: 2169-3536, Digital Object Identifier: DOI: 10.1109/ACCESS.2023.3329759. **(Q1-SCI journal). (IF – 3.367).**

2. Vinita Sankla, Savitanandan Patidar, Vishal kushwaha, Ashish Bagwari, Rahul Tiwari, Shamimul Qamar, and Gaurav Verma, "Facemask Detection with an Alarm System and Email Notification Using Deep Learning to Prevent Spread of COVID-19", "Wireless Personal Communications, Springer", Vol. xx, No. xx, pp xx-xx, xxxxxx 2021, **ISSN: 0929-6212 (print); 1572-834X (Electronic)**, **(Under Review) (SCI journal). (IF – 1.2).**
3. Ashish Bagwari, J. Logeshwaran, K. Usha, R. Kannadasan, Mohammed H. Alsharif, Peerapong Uthansakul, and Monthippa Uthansakul, "An Enhanced Energy Optimization Model for Industrial Wireless Sensor Networks Using Machine Learning ", "IEEE Access", Vol. 11, No. 2023, pp 96343-96362, 04 September 2023, Electronic ISSN: 2169-3536, Digital Object Identifier: 10.1109/ACCESS.2023.3311854. **(Q1-SCI journal). (IF – 3.367).**
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2. Shivangi Gautam, Kritika Rathi, Ashish Bagwari, and Ahmed Alkhayyat, "Application of machine learning in malware detection for Android", "International Conference on Wireless Technologies, Networks, and Science 2022: ICWTNS2022, 6–7 October 2022, collaboration of Al-Balqa Applied University, Jordan and AAIR Lab Dehradun, India, AIP Conference Proceedings (AIP Conf. Proc.),

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35. Ruhi Parveen, Tripti Bijalwan, and Ashish Bagwari, "Proposed Model of Sliding Roof Based on Sensors with Solar Panel", IOCRSEM-2014: \"International Online Conference on Research in Science, Engineering and Management\", pp 650-653, August 2014, ISBN: 978-93-5174-703-1.
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2. Ashish Bagwari, and Geetam Singh Tomar, "New Spectrum Sensing Technique for Cognitive Radio Networks", National Conference on communication systems and advanced computing (NCCAC-2016), T.H.D.C.I.H.E.T, Tehri, Garhwal, India, Paper ID 75, pp 26, June 2016.

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1. Ashish Bagwari, and Geetam Singh Tomar, "Collaborative Spectrum Sensing Technique Based on Energy Detector implies Multiple Antennas with Adaptive thresholds in Cognitive Radio Networks", *Book entitled- Cognitive Networks: Applications and Deployments* by CRC Press, Taylor & Francis Group Publication, USA, published in December 2014, ISBN: 978-1-4822-3699-6. Further details: http://www.crcpress.com/product/isbn/9781482236996. **(Scopus indexed).**
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7. Ashish Bagwari, Jyotshana Bagwari, Geetam Singh Tomar, and Robin Singh Bhadoria, "New Spectrum Sensing Technique for Advanced Wireless Networks", *Book entitled- Advanced Wireless Sensing Techniques for 5G Networks* by CRC Press, Taylor & Francis Group Publication, UK, published in August 2018. ISBN: 978-0-8153-7837-2. **(Scopus indexed).**
8. Pooja Joshi, and Ashish Bagwari, "5G Technology Universally Connected to Digital Society", *Book entitled- Advanced Wireless Sensing Techniques for 5G Networks* by CRC Press, Taylor & Francis Group Publication, UK, published in August 2018. ISBN: 978-0-8153-7837-2. **(Scopus indexed).**

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13. Farah Samir, Aya ElGarhy, and Ashish Bagwari, "The Effects of Implementing the Advanced Cargo Information (ACI) System on Egyptian Importers", Book entitled- Cases on International Business Logistics in the Middle East by IGI Global (formerly Idea Group Inc.), publisher, USA, Pages 52-72, published in February 2023, ISBN 9781668446867, DOI: 10.4018/978-1-6684-4686-7.ch003. **(Scopus indexed). https://www.igi-global.com/gateway/book/291560**
14. Ashrakat Osama, Ashish Bagwari, and Nada Hossam, "The Effect of Using Intelligent Transportation Systems on Transportation Sustainable Development in Egypt", Book entitled- Cases on International Business Logistics in the Middle East by IGI Global (formerly Idea Group Inc.), publisher, USA, Pages 73-90, published in February 2023, ISBN 9781668446867. DOI: 10.4018/978-1-6684-4686-7.ch004. **(Scopus indexed). https://www.igi-global.com/gateway/book/291560**

Books/ Proceedings Published:

1. Author book on "Analog Communication".
Publisher: PHI Learning Private Ltd, Delhi, India. (ISBN: 978-81-203-5095-3).
Publication date: January 1, 2016, Reference - 432 Pages, (ISBN: 978-81-203-5095-3).
https://www.amazon.in/Books-Ashish-Bagwari/s?rh=n%3A976389031%2Cp_27%3AAshish+Bagwari

2. Editor book on **"Introduction to Cognitive Radio Networks and Applications".**
Publisher: CRC Press, Taylor & Francis Group, UK. Publication date: June 26, 2016, Reference - 450 Pages, ISBN 978-1-4987-6298-4 - CAT# K28944.

3. Editor book on **"Sensing Techniques for Next Generation Cognitive Radio Networks".**
Publisher: IGI Global Publication, USA.
Publication date: August 30, 2018, Pages – 356, ISBN-13: 978-15-225-5354-0.

4. Editor book on **"Advanced Wireless Sensing Techniques for 5G Networks".**
Publisher: Chapman and Hall/CRC Press, Taylor & Francis Group, UK.
Publication date: October 2018, Page- 320, eBook ISBN: 978-0-8153-7837-2.

5. Author book on **"Fundamentals of Electronic Devices & Circuits".**
Publisher: Springer Publishing Ltd, India.
Publication date: November 2019, Page- 400, Book ISBN: 978-981-15-0266-8,

6. Editor book on **"Advanced Wireless Communication and Sensor Networks: Applications and Simulations".**
Publisher: Chapman and Hall/CRC Press, Taylor & Francis Group, UK.
Publication date: June 2023, Page- 360, ISBN: 978-1-0323-4718-9.
https://www.routledge.com/Advanced-Wireless-Communication-and-Sensor-Networks-Applications-and-Simulations/Bagwari-Tomar-Bagwari-Barbosa-Sastry/p/book/9781032347189

7. Author book on **"VLSI Design and Technology". (Under Publication)**

Publisher: Khanna Publication, New Delhi, (AICTE Approved, Ministry of Education, Govt. of India) India.
Publication date: March 2023.

8. Editor of the AIP Conference Proceedings (AIP Conf. Proc.) for "International Conference on Wireless Technologies, Networks, and Science 2022: ICWTNS2022, 6–7 October 2022, collaboration of Al-Balqa Applied University, Jordan and AAIR Lab Dehradun, India.
Publisher: AIP Publishing, USA.
Publication date: 10th November 2023, Page- 420, Book ISBN: 978-0-7354-4743-1.
https://pubs.aip.org/aip/acp/issue/2930/1#15641-2920751

Contribution to Institutional Corporate life:

A. Institute level:

1. Convener WIT-Purchase committee 2013-2020, member Purchase committee 2020-Present.
2. Convener/ Head WIT-Laboratory committee 2013-2018.
3. Convener/ Head of WIT-Library committee 2015-January 2018.
4. Convener/ Head of WIT-SPORTS committee 2013-2015.
5. Convener/ Head of Scholarship committee of WIT, UTU 2013-2015.
6. Member of Placement committee recommended by UTU, Dehradun in 2015.
7. Member of Students Grievances Redressal Committee (SGRC) of WIT, UTU, Dehradun in 2023-Pressesnt.
8. Member of Selection Committee for Lab technician for WIT/ SIT/ IT-G constituent college's in 2014-15.
9. Coordinator for World Bank sponsored Technical Education Quality Improvement Programme (TEQIP-III: Continuing since 08.09.17).
10. Committee member of UTU B.Tech. 2013-14 state counseling.
11. Member of organizing committee of One day Workshop on Intellectual Property Rights (IPR): In-house Patent filling, organized by Uttarakhand Technical University (UTU), Dehradun, on 24th-August-2015.
12. Head Evaluator of External Examination of Uttarakhand Technical University, Dehradun, year 2015-16.
13. Flying squad of External Examination of Uttarakhand Technical University, Dehradun, year 2015-16.
14. Question paper setting of various Subjects of Uttarakhand Technical University, Dehradun.
15. Evaluations of B.Tech. Level Answer sheets of UTU, Dehradun, year-2013, 2014, 2015, 2016.
16. Valuator Incharge of External Examination of Uttarakhand Technical University, Dehradun, year 2020-21.
17. Public Information Officer (P.I.O.) of R.T.I. Cell of WIT from June 2020 to till date.
18. **Organizing Secretary** of IEEE International WITCON-ECE-2019 held on 22-23 November 2019, organized by WIT, UTU, Dehradun, Uttarakhand. (www.witconece.org)

    https://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=9092911

    https://easychair.org/cfp/WITCONECE-2019

20. Project Coordinator of Technical Education Quality Improvement Programme (TEQIP-III) of Ministry of Human Resource and Development (MHRD), Government of India, funded by World Bank from September 2017-2022.
21. Organizing Secretary of IEEE International WIE Conference on Electrical and Computer Engineering (IEEE WIECON-ECE-2017) held on 18-19 December 2017, organized by WIT, UTU, Dehradun, Uttarakhand.

    https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=8468903

    https://wiecon-ece.org/ieee-wiecon-ece-2017/

B. Department Level:

1. Head, Dept. of Electronics and Communication Engg., year 2015 till date.

2. Established the various ECE labs like Advanced PCB Lab, Antenna Lab using HFSS and VNA, Advanced Research Lab using NETSIM, Advanced DSP Lab using Mentor DSP, Microprocessor Lab using Proteuos, CAD for Electronics Lab using Microwind.
3. Project Coordinator of B.Tech. ECE 4th year students year 2014-15.
4. Departmental Lab's Incharge (22.04.2013-18.06.2015).
5. Member of Departmental library committee 2015-2016
6. Class coordinator of B.Tech ECE 3rd year 2013-2014.
7. Class coordinator of B.Tech ECE 4th year 2014-2015.

References

Will be available upon request.