**CURRICULUM VITAE**

## 1. Personal Information

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| (i) | Name | Prof.(Mrs.)Anjana Jain |
| (ii) | Qualification | Ph.D. |
| (iii) | Designation | Professor |
| (iv) | Email-id | anjana_jain@sgsits.ac.in |
| (v) | Employee No. | 0400203 |
| (Vi) | Department | Electronics and TeleCommunication |
| (vii) | Experience | 32 years |

## 2. Educational Qualification

| S. No. | Degree | Specialization | Year | University/Board |
|---|---|---|---|---|
| 1. | Ph. D. | Electronics and Communication Engg. | 2013 | RGPV, Bhopal |
| 2. | M. E. | Electrical Engg. specialization in Digital tech. | 1996 | DAVV, Indore |
| 3 | B. E. | Electronics and Communication | 1989 | MANIT, Bhopal |

## 3. Research Interests

Mobile Radio channel characterization, Stochastic Modeling, Machine learning in Wireless Communication, Cognitive Radio Network.

## 4. Research Paper Publications

**(I)    International/National Journal Publications**

1. AnkitaMangalmurti,JankeeUpadhyay,SudhirKumar,RajeshArya,AnjanaJain,PreetiTrivedi,   StaticmodetestingofS-20 OpticalStreakCamera, IETE Journal of Research, 2024.
2. 
3.  Sheetal Ganorkar, Shekhar Sharma, Anjana Jain, Taylor & Francis,IETE Journal of Research Online. FPGA Implementation of an Adaptive Equalizer with TLBO and PSO Variant, April 2023.
4. 
5. Mahima Choudhary, Anjana Jain, Shekher Sharma, An Algorithmic Game Theory Approach for the Stable Coalition and Optimum Transmission Cost in D2D Communication, June 2020, Springer LNNS https://www.springer.com/series/15179.

6. Anjana Jain, Gender Gap in Science, Publisher International Mathematical Union, June 2020 Pp, ISBN-10 3000655336, ISBN-13 9783000655333.

7. Kewal Sohani, Anjana Jain, Power Allocation mechanism in Uplink NOMA using Evolutionary Game Theory , Springer AISC series, Advances in Intelligent and Soft Computing, ISSN: 2194-5357, 2019.

8. Pradeep Shah,P.D. Vyavahare, Anjana Jain, "Performance Analysis and Comparison of Various Channel Decoding Techniques", springer series, Series Title Smart Innovation, Systems and Technologies Series Volume 77, 2016, eBook ISBN,978-981-10-5544-7.

9. Akansha Gupta, Anjana Jain, P.D. Vyavahare, An Empirical Study of OSER Evaluation with SNR for Two-Way Relaying Scheme, Intelligent Systems Technologies and Applications, Springer Volume 385, 2016, ISBN: 978-3-319-23257-7 (Print) 978-3-319-23258-4 (Online), pp 67-74.

10. Akansha, Anjana Jain, P. D. Vyavahare "Performance analysis of decode and forward cooperative diversity networks with threshold scheme", IOP Conference series, vol. 67, Sept. 2014.

11. Abhijeet, Anjana Jain, A. Shrivastava "ICI Reduction using Quadrature Kalman Filter for OFDM System", ISBN 973-93-80877-65-8, International Journal of Computer Applications, Foundation of Computer Science, New York, USA, IJCA September 2013.

12. Anjana Jain, P. D. Vyavahare ,L.D. Arya"Availability of wireless fading channel under outage state with tolerance time", International Journal of Simulation: Systems, Science & Technology, UK, vol. 12, no. 1, 2012, pp 40-45.

13. Anjana Jain, P. D. Vyavahare ,L.D. Arya ,"Estimation of Fading Statistics of Nakagami Channel with Weibull Distributed Tolerable Outage Time", WET, USA, Feb. 2012, pp. 77-82.

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**(II) International/National Conference Publications**

1. Sunita verma, AnjanaJain, Sangeeta shukla, Vinita Kothari, "AI Driven Medical Prediction and Suggestive System to Establish Good Health and Well Being in Society – A Real Time Case Study", INFUS 16 – 18 July 2024, Turkey. (Second best paper award)
2. Anjana Jain, "Spectrum policy and reforms in India for sustainable telecom connectivity in Rural area" in Workshop on "Communication in Extreme Environments for Science and Sustainable Development", Abdus Salam International Centre for Theoretical Physics (ICTP) in Trieste from 20 November 2023 to 24 November 2023.
3. Anjana Jain, "Concept of tolerance time for state decision process in Markov modelling of wireless channel for reliability improvement", poster presentation in the IEEE European School Of Information Technology 2023, during 17 to 21 July 2023 in University of Bristol, Bristol UK.
4. Sheetal Ganorkar, Anjana Jain, Shekher Sharma, Implementation of adaptive filter on FPGA', CSNT 2022 April 2022.
5. Abha Porwal et.al, Pridiction and prevention of water pollution by Industries using IOT based monitoring system, CSNT 2022 April 2022.
6. Sheetal Ganorkar, Anjana Jain, Shekher Sharma, Soft Computing Algorithms and Implementation on FPGA-A Review', ICWMC April 2021.
7. Pradeep Shah,P.D. Vyavahare, Anjana Jain, Three Dimensional Interleaver For Improving Forward Error Correction In Next Generation Wireless Networks , INDIACom – 2021, sponsored by IEEE Delhi Section, 17th - 19th March, 2021, Bharati Vidyapeeth, New Delhi (INDIA),ISBN 978-93-80544-43-4 serials.
8. Ashwin Shrivastav,Anjana Jain,Mohit khamele, P.D. Vyavahare, The Teaching of Social Awareness for Human Values & Ethics in Engineering Education,Conference on Indian Knowledge Systems, Madhya Pradesh Vigyan Sammelan & Expo (MPVS-2021),IIT Indore, MPCST and Vigyan Bharati, 22nd-25th December 2021.
9. Namarata Sahayam, Anjana Jain, Shekher Sharma, "Game theoretical approach for cluster-based routing protocol in Wireless Sensor Networks "n International e-Conference on Intelligent Systems and Signal Processing (e-ISSP 2020) organized by Electronics & Communication Engineering Department of G H Patel College of Engineering & Technology, VidyaNagar, Gujrat, 28-30 December, 2020.
10. Mahima Choudhary, Anjana Jain, Shekher Sharma "An Algorithmic Game Theory Approach for the Stable Coalition and Optimum Transmission Cost in D2D Communication" ,4th International Conference on Information and Communication Technology for Intelligent Systems, May 2020, Ahemedabad.

11. Pradeep Shah,P.D. Vyavahare, Anjana Jain " Modern error controlling codes for 5G: LDPC code", 13-14 Dec 2019, ICTCS 2019,Udaipur.
12. Pradeep Shah,P.D. Vyavahare, Anjana Jain    Performance Evaluation of LDPC code,     International Conference on Network and cryptology,  JNU, New Delhi, 14 – 16 June 2019.
13. Kewal Sohani, Anjana Jain, P.D. Vyavaharem, Power Allocation mechanism in Uplink NOMA using Evolutionary Game Theory , ICICC-2019, Bangalore, ,Dayananda Sagar University,  07-08 June 2019, Springer AISC series, Advances in Intelligent and Soft Computing, ISSN: 2194-5357.
14. M Shah, Pradeep and D Vyavahare, Prakash and Jain, Anjana, Performance Analysis of Turbo Iterative Decoder with EXIT Chart (April 1, 2019). Proceedings of Recent Advances in Interdisciplinary Trends in Engineering & Applications (RAITEA) 2019. SSRN: https://ssrn.com/abstract=3363551 or http://dx.doi.org/10.2139/ssrn.3363551.
15. Ankita Rai, Anjana Jain, P.D. Vyavahare Distributed DOS Attack Detection And Mitigation In Software Defined Network, Elsevier, International conference on "Recent advances in interdisciplinary trends in Engg. And Application", Indore, 14-16 Feb. 2019. Best paper award, ,
16. Kewal Sohani, Anjana Jain, P.D. Vyavahare, Game Theoretic Resource Allocation in Full Duplex Modes: A Comparative Analysis",  IEEE International Conference on Advanced Networks and Telecommunications Systems (ANTS- WIE 2018), 16- 19 Dec. Indore, M.P
17. Ashwin Shrivastava, Anurag Shrivastava, Anjana Jain, P.D. Vyavahare "Improvement in the Attainment of COs in OBE system using  novel pedagogical techniques : A case Study",  fourth World Summit on Accreditation (*WOSA 2018*) , organized by NBA ,  New Delhi, 07th to 09 th September 2018.
18.  Akanksha Gupta,  Anjana Jain, Dr. P. D. Vyavahare " Performance Analysis of  Concatenated LDPC Codes for Video Broadcast Satellite System",    5th series of IEEE Radio and Antenna Days of the Indian Ocean (RADIO) Cape Town from 25th to 28th September 2017.
19. "Performance Analysis Of Routing Protocol Based On Sojourn Time In Manet", A.Jain,  A.Shrivastava, ,Shruchi Jain, International Conference on Recent Innovations in Signal processing and Embedded systems (RISE-2017) at Maulana Azad National Institute of Technology Bhopal to be held during 27 – 29th October 2017.

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## 5.  List of Conferences/Workshops/Seminars Organized

1. Advisory member as an OBE Expert Feb. 2023, Department of Electronics and Telecommunication Egg. , SAGE university Bhopal.

2. Co-convener and Mentor IDEATHON  Feb. 2020, May 2021, event Arambh April 2022, April 2023 SGSITS, Indore.

3. Coordinator, Two days interactive session on NBA preparation for PG course and Appeal application, 15-16 April 2019, SGSITS, Indore

4. Mentor, E Summit, 09-10 March 2019,  organized by E Cell and CIDI, SGSITS,  Indore.

5. Session Chair, 2018 IEEE International Conference on Advanced Networks and Telecommunications Systems (ANTS- 2018),  19 Dec. 2018, Indore, M.P

6. Convener, One week AICTE-ISTE Refresher programme Design Development Fabrication Manufacturing Testing of Antenna, 30 Nov -06 Dec. 2018.

7. Organising committee member of Two days workshop on "Remote sensing and satellite technology", by CRSST, SGAITS, Indore, 17 -18 Oct. 2018.

8. Co-cordinator for NBA workshop 11-12 April 2018, S.G.S.I.T.S. Indore.

9. Advisory member as a Head ,"Technical report writing and presentation development using LaTex" during March 23-24, 2018 under TEQIP-Phase III programme.

10. Advisory member as a Head, "Mathematical Techniques in Wireless Networks (MTWN)" on 27 and 28 October 2017, Department of Electronics and Telecommunication Egg. Under TEQIP III, SGSITS, Indore.

11. NBA Co coordinator, "Outcome based Education" NBA Workshop, 9-10 March 2018, S.G.S.I.T.S., Indore, (M.P.).

12. Co-coordinator, One day visit for faculty members and PG student to ISRO –BHOPAL, 25/10/17.

13. Advisory member as a Head, "Institute satellite and launching" 18- 19 Feb 2017, Department of Electronics and Telecommunication Egg. Under TEQIP II, SGSITS, Indore.

13. Visit Coordinator for a One day visit to IIT Indore, Study at France, for faculty members and PG student.

14. One day workshop on "PG Projects Initiatives: Institute-Industry Interaction" , 12 th August 2016, Department of Electronics and Telecommunication Egg. Under TEQIP II, SGSITS, Indore.

15. One day seminar on "Communication and Cryptography: Shannon's Centenary Year Celebration", technically supported by the Information Theory Society of IEEE (USA), 30 April 2016, Department of Electronics and Telecommunication Egg. Under TEQIP II.

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## 6. Invited Lectures/Expert Talks/Chairmanships at Conferences

1. An oral presentation on "Spectrum policy and reforms in India for sustainable telecom connectivity in Rural area" in Workshop on "Communication in Extreme Environments for Science and Sustainable Development", Abdus Salam International Centre for Theoretical Physics (ICTP) in Trieste from 20 November 2023 to 24 November 2023.
2. An expert talk on IEEE membership and research 11 August 2023, Research summit for Women, SGSITS, Indore.
3. An expert talk on International Women's Day, 13 March 2023 on" Embrace Equity" Under WiE, Acropolice Institute, Indore.
4. An expert talk on National Science Day, 3 March 2023 on" Global science for Global well being" Dept of Mathamatics ,SGSITS under MPCOST.
5. A talk on "Institute and Hostel" 12 Oct 2022 Induction program, SGSITS, Indore.
6. An expert talks on "Game Theoretic Approach for Improving Key Performance Parameters in Cell-Free Massive MIMO Communication System" Virtual IEEE 2021 Future Networks Workshop on Massive MIMO, 10 Nov 2021.
7. Change project presentation (Online) on "Introducing New Domain of Learning and Assessment Tool in programme curriculum", under UKIERI –AICTE Leadership Management Programme, 17 August 2020, Dudley College, UK.
8. A Lecture in Lecture series (online) on "Accreditation a continuous process: Let's make it more effective", 2018, TEQIP III, SGSITS, Indore.
9. An Expert Talk on "Minimum requirements for IMT-2020 radio interface" Two week AICTE-ISTE FD, Recent advances in Microwave and Communication, 03 Dec. 2019.
10. An Expert Talk on Global Approach to the bridge Gender Gap: Good practices, Two week AICTE-ISTE FD, Recent advances in Microwave and Communication, 03 Dec. 2019.
11. An Expert Talk on Global Approach to the bridge Gender Gap: Good practices, 29 Aug 2019 Department of IT and Computer Egg. Faculty members in IT department.
12. An Interactive session on Global Approach to the bridge Gender Gap: Good practices, and survey in Two week AICTE-ISTE FDP, Recent advances in Microwave and Communication, 03 Dec. 2019.
13. An expert Talk on "NBA Accreditation process", TEQIP III, Two Days workshop on Accreditation, organized by RGPV, 11 June 2019, Sagar group of Institute, Bhopal.
14. An expert Talk on "NBA Accreditation process", TEQIP III Two Days workshop on Accreditation, organized by RGPV, 30 April 2019, MITS Ujjain.
15. An expert talk, "Emerging Technologies for Telecommunication", Prestige Institute of Tech. Management and Research, Indore, India, 03 April 2019.
16. An expert talk, "Emerging Communication Technologies for Hyper connected world", Acropolis Institute of Tech., Indore, India, 28 Feb. 2019.
17. An Expert Talk on "Game Theory and Multiple Antenna system" One week AICTE-ISTE Refresher programme Design Development Fabrication Manufacturing Testing of Antenna, 05 Dec. 2018.
18. Keynote Address, IEEE - ANTS 2018- WIE, 18 Dec. 2018, "Emerging ICT techniques for Hyper connected world", Indore, India.
19. An expert Talk on "NBA Accreditation SAR preparation", 07 Dec. 2018 at Oriental college of Egg. , Bhopal.
20. An expert Talk on "NBA Accreditation process and Compliance report", 15 Oct. 2018 at IPS, Indore.

21. An expert Talk on "NBA Accreditation process- How to Start", 15 Oct. 2018 at Bansal group of Institute, Indore.
22. An expert Talk on "NBA Accreditation process", Friday 20th July 2018 at Chameli Devi Group of Institutions, Indore.
23. Two days workshop on NBA Outcome based Education, organized by RGPV, Bhopal 13 April 2018, "How to persue for NBA:Challenges".
24. An expert Talk on "NBA Outcome based Education", at Prestige Institution, Indore June 2018.

25. World Telecomm Day 17 May 2016, "Challenges and Feasible approaches for 5G implementation", IPS, Indore.

26. Two day Seminar on Importance of GI -FI Technology in Wireless Communication", Millennium Group of Institutions, Bhopal , 15/03/2016 on "5G Key technologies Air Interface and Spectrum : An overview".

27. National Conference on "Advanced communication technologies", Dec. 01, 2015, Department. Of Electronics and Telecommunication, UET, Ujjain, on "5G Networks: Challenges and suitable approaches".

28. National Conference on "Innovation in Electronics", February 21, 2015, Department. Of Electronics and Telecommunication, LNCT, Bhopal, on "Innovation in Communication".

29. One week STTP on "Fundamentals and Applications of Wireless Communication", January 28, 2014, Department. Of Electronics and Telecommunication, S.G.S.I.T.S. on "Characterization of fading channel and its modelling".

30. One week TEQIP summer school on "Application of simulation in communication", Department of Electronics and Communication Engineering, UIT, Rajiv Gandhi Prudyogiki Vishwavidalaya, Bhopal, 21 Jan. 2014, on "Characterization of wireless channel and its Simulation".

31. Presentation on "Spectrum management in India for Wireless Telecomm Services", 23 Feb 2007, ICTP, Italy.

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## 7. Other Relevant Information

**Course/Industry participation**

1. One Day Industry visit on 10th Feb. 2024, Bridge stone, Pithampur
2. Workshop on "Communication in Extreme Environments for Science and Sustainable Development", Abdus Salam International Centre for Theoretical Physics (ICTP) in Trieste from 20 November 2023 to 24 November 2023.
3. IEEE Women in Engineering International Leadership Summits (WIE ILS), Raipur 25-26 August2023.
4. IEEE European School of Information Technology 2023, during 17 to 21 July 2023 in University of University of Bristol, Bristol UK.

5. AICTE FDP on UHV, 26 June to 01 July 2022.

6. IEEE Women in Engineering International Leadership Summits (WIE ILS), Nagpur, 7 - 9 Nov 2020.

7. IEEE International Conference on Communications,7-11 June 2020 // Virtual Conference, Communications Enabling Shared Understanding

8. Two days camp at Gram Badarkha, Sawer, M.P., NSS, and 21-22 Feb. 2020.

9. One day seminar on "Enabling 5G in India", organized by TRAI Bhopal, 24 Jan. 2020, Indore.

10. II AICTE-UKIERI Technical leadership programme 2019-2020 workshop, 08 -12 Dec 2019, JIET Jodhpur.

11. Equity at work place, One day seminar, 23 Nov. 2019, SPIU Bhopal.

12. Conference on Global Approach to the Gender Gap in Mathematical, Computing and Natural Sciences: How to Measure It, How to Reduce It? Funded by the International Council for Science, Abdus Salam International Centre for Theoretical Physics, Trieste, and 04 November 2019 to 08 November 2019.

13. I st AICTE-UKIERI Technical leadership programme 2019-2020 workshop, 06 -09 August 2019, AICTE Head Office, New Delhi.

14. 2019 Joint Telematics Group/IEEE Information Theory Society "Summer School on Signal Processing, Communications and Networks, 25 -28 June. 2019 at IIT Chennai, India.

15. One Day Industry visit on 19th March 2019, Shakti Pump, Pithampur.

16. One day seminar "For academic, scientific and technological cooperation" by the embassy of France, 9 Feb. 2019 at Embassy of France, New Delhi.

17. Two days Training on "Image Processing for Remote sensing and satellite technology", by CRSST, SGAITS, Indore, 14-15 Jan. 2019.

18. Two days workshop on "Outcome based Education", by COEP, Pune, 10-11 Dec. 2018.

19. Two days workshop on "Remote sensing and satellite technology", by CRSST, SGSITS, Indore, 17 -18 Oct. 2018.

20. Fourth World Summit on Accreditation (*WOSA 2018*), organized by NBA, in New Delhi from 07th to 09 th September 2018.

21. ISRO, Banglore and PES Bangalore visit as a member of CRSST, 24-25 August 2018, S.G.S.I.T.S., Indore, and M.P.

22. 2018 Joint Telematics Group/IEEE Information Theory Society "Summer School on Signal Processing, Communications and Networks, 2- 5 July. 2018 at IIT Bombay, India.

23. One day visit to ISRO –BHOPAL, 25/10/17.

24. One day visit to IIT Indore, Study at France.

25. 2017 Joint Telematics Group/IEEE Information Theory Society "Summer School on Signal Processing, Communications and Networks, 28- 31 May. 2017 at IIT Bombay, India.

26. "Intellectual property right" 16 March 2017, S.G.S.I.T.S., Indore, M.P.

27. "Game theory and Mathematical Modelling", ISI Delhi, 8-11 Jan 2017.


**Membership of professional society**

1. IEEE Senior Membership

2. WIE Annual membership

3. Chartered Management Institute (CMI), Member, as part of the CMI Level 5 Certificate in Management and Leadership with Dudley College of Technology.

4. Individual full membership of TWOWS (Third World Organization of Women in Science), ICTP, Italy.

5. Life membership of IETE (Institution of Electronics and Telecomm Engineers),

6. Life membership of ISTE. (Indian Society for Technical Education)

7. Life membership of IEI. (Institution of Engineers India)

8. Life membership of CRSI (Cryptology research society of India).

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| **9.** | Life membership of ISRS. |

**Research Paper presented and Conference attended Abroad**

1. "Spectrum policy and reforms in India for sustainable telecom connectivity in Rural area", in Workshop on "Communication in Extreme Environments for Science and Sustainable Development", Abdus Salam International Centre for Theoretical Physics (ICTP) in Trieste from 20 November 2023 to 24 November 2023.

2. "Concept of tolerance time for state decision process in Markov modelling of wireless channel for reliability improvement", poster presentation in the IEEE European School Of Information Technology 2023, during 17 to 21 July 2023 in University of Bristol, Bristol UK.

3. "Gender statistics in Institute" Poster presentation in Conference on Global Approach to the Gender Gap in Mathematical, Computing and Natural Sciences: How to Measure It, How to Reduce It? funded by the International Council for Science, Abdus Salam International Centre for Theoretical Physics, 04 November 2019 to 08 November 2019, Trieste, Italy.

4. "Game Theoretic Resource Allocation in Full Duplex Modes: A Comparative Analysis", 2018 IEEE International Conference on Advanced Networks and Telecommunications Systems (ANTS- WIE 2018), Indore, M.P.

5. "Improvement in the Attainment of Cos in OBE system using novel Pedagogical techniques: A case Study", in the fourth World Summit on Accreditation (WOSA 2018), organized by NBA, in New Delhi, from 07 th to 09 th September 2018.

6. " Performance Analysis of Concatenated LDPC Codes for Video Broadcast Satellite System", 5 th series of IEEE Radio and Antenna Days of the Indian Ocean (RADIO) Cape Town from 25 th to 28 th September 2017.

7. "Development of Outage Tolerant FSM Model for Fading Channels", 12th annual International Conference on Wireless Networks, July 22-25, 2013, Las Vegas, USA.

8. "Outage Statistics based Analysis of Sectored Mobile system as a Spectrum Efficient Congestion Control Technique", 20 th International Wroclaw Symposium on EMC 2010 at Wroclaw, Poland from 13 th September to 17 th September 2010.

9. "Monte Carlo Simulation based Error Performance Analysis of DS-CDMA System", in IEEE International Conference AMS 08, Kualalampur, Malaysia, 13 -15 May 2008.

10. "Stochastic Modelling and Performance Evaluation of Fading Channel for Wireless Network Design" 21 to 23 may 2007, IEEE International Conference AINA 07, PAEWN, at Niagara Falls, Canada.