

Profile of Prof. Anita Yadav

Name & Designation : Anita Yadav
Professor,
Computer Science and Engineering Department,
School of Engineering
&
Associate Dean, Planning and Resource Generation
Training & Placement
HBTU Kanpur

Academic Qualification :

Sl. No.	Examination Passed	Month/year of passing	University / Board	%age/CGPA/ CPI of marks
1.	High School	June, 1982	U. P. Board	73.4 %
2.	Intermediate	June, 1984	U. P. Board	70.0 %
3.	B. Tech. (Computer Science)	June, 1988	Institute of Engineering & Technology, Lucknow (Lucknow University)	8.61 / 10 (CGPA)
4.	M. Tech. (Computer Science & Engineering)	March, 2006	U. P. Technical University, Lucknow	9.5 / 10 (CGPA)
5.	Ph. D. (Computer Science & Engineering)	January, 2016	Dr. APJ Abdul Kalam Technical University, Lucknow	

Ph. D Topic: Cross Layer Optimization for Protocols in Mobile Adhoc Networks.

Professional Experience :

(1) Industrial Experience :

As Assistant Executive Engineer in CAD-ATS (Computer Aided Design – Automatic Test System) group of Research & Development Division of Indian Telephone Industries Limited, Naini, Allahabad (U.P.).
Duration: 3 Years and 9 Months

(2) Academic Experience :

(a) As Lecturer, Sr. Lecturer, Assistant Professor and Associate Professor in Computer Science & Engineering department of Harcourt Butler Technological Institute, Kanpur (U. P.). Duration: 23 Years

(b) As Professor in Computer Science & Engineering department of Harcourt Butler Technical University, Kanpur (U. P.) since 16th January 2016 till date. Duration: 8 Years

Professional Experience :

Developments & Achievements :

(1) Indian Telephone Industries Limited, Naini, Allahabad - Worked in Research and Development Division

- A. Developed hardware and software of Automatic test Systems for testing MARR (Multi Access Rural Radio), CTE-ERICSSON (Channel Translating Equipment) & 3 Channel Open Wire Telecommunication Equipments and other exchange end equipments.
- B. Developed PC based information systems for various departments (like Research and development, HRD, Sales, Production and etc) of the organization using dBASE III Plus and LOTUS 1-2-3 packages.
- C. Developed hardware and firmware for GP-IB decoder based on Z80 microprocessor and its support circuitry, which is being extensively used in production shop in Automatic Test systems.
- D. Developed hardware and firmware for listener interface of “Programmable Low Frequency Oscillator” based on Z80 microprocessor and its support circuitry.
- E. Maintained existing (12 Nos.) Automatic Test Systems in production shop.
- F. Worked on design & development of in-house Printed Circuit Boards (PCB), design & programming of PLDs/EPLDs, VLSI Designing, DSP, VXI Bus based systems and Expert Systems.

(2) Administrative Experience - Computer Science & Engineering Department, School of Engineering, Harcourt Butler Technical University (Formerly Harcourt Butler Technological Institute), Kanpur

- A. Associate Dean, Planning and Resource Generation from 7th April 2022 and University Faculty-Incharge Placement/Officer-Incharge, Training and Placement Cell at University (Institute) level from 1st July 2013 to 6th April 2022.
- B. Warden of Bhagirathi/GH-IV Girls Hostel for Final year B. Tech., MCA, M. Tech. and Ph. D. girl students in HBTU Kanpur, Warden, Sarswati Girls Hostel for PG girls and was Warden, GH-I Girls Hostel.
- C. Member, Proctorial Board.
- D. Member, BOS for B. Tech. (CSE), B. Tech. (IT) and MCA programmes in the Department HBTU, Kanpur, IET Lucknow and Member, BoS, UPTTI Kanpur.
- E. Member, Equity assurance under TEQIP III cell and TEQIP-II core committee.
- F. Worked as Convener, Women’s Grievance Redressal Cell.
- G. Convener, DPC, Training & Placement cell and member, DPC, Electronics Engineering Department, Bhagirathi, Saraswati Girls Hostels and Dean, PRG Office.

Journal Publications

- 1. Anita Yadav, Y. N. Singh and R. R. Singh, “Improving routing performance in AODV with link prediction in mobile adhoc networks”, *Wireless Personal Communication*, Volume 83, Issue 1, pp. 603–618, July 2015. (DOI 10.007/s11277-015-2411-5, SCIE indexed, Impact Factor 1.671)
- 2. Anita Yadav, Y. N. Singh and R. R. Singh, “Dynamic Power Control MAC Protocol in Mobile Adhoc Networks”, *International Journal of Innovations & Advancement in Computer Science*, Volume 4, Issue 3, pp. 77–81, March 2015. (ISSN 2347 – 8616, Scopus indexed)

3. Anita Yadav, Y. N. Singh, Raghuraj Singh, "Cross Layer Design for Power Control and Link Availability in Mobile Adhoc networks", *International Journal Computer Networks and Communication*, Volume 7, Number 3, pp. 127–143, May 2015 (UGC-Care list).
4. Rashmi Singh, Yatindra Nath Singh, Anita Yadav, "Multipath Routing Algorithm", *arxiv.org*, online available from 07 January 2016.
5. Medha Trivedi, Anita Yadav, "An Overview of Localisation Techniques in Wireless Sensor Networks", *International Journal for Scientific Research in Engineering and Management*, Vol. 4, Issue 5, May 2020. (Impact factor 4.106, ISSN : 2582-3930)
6. Maya Diwakar, Anita Yadav, "A Survey on TCP Congestion Control and Its Variants in Wireless Networks", *International Journal of Future Generation Communication and Networking*, August 2020. (Web of Science and ESCI indexed, ISSN: 2233-7857)
7. Abhishek Bajpai, Shashank Yadav, Naveen Tiwari, Anita Yadav, Mansi Chaurasia, "A Novel Power-Efficient Data Aggregation Scheme for Cloud-Based Sensor Network", *International Journal of Mobile Computing and Multimedia Communications*, Volume 13, Issue 1, January 2022 (ESCI and Scopus Indexed, IGI Global Publisher).
8. Maya Diwakar, Anita Yadav, "An efficient modified slow-start mechanism for TCP performance enhancement", *International Journal of Scientific Research in Engineering and Management*, Volume 6, Issue 7, July 2022. (UGC Care Journal, Impact Factor 7.185, ISSN: 2582-3930)
9. Anita Yadav, A. K. Goyal, "General Purpose Interface Bus (GPIB) Decoder", *Computers in Industry, Elsevier*, June 1993 (SCIE indexed, Impact Factor 7.365, ISSN 0166-3615).
10. Anita Yadav, A. K. Goyal, "Faster division and string conversion", *Electronic Engineering* (published by MILLER FREEMAN TECHNICAL LTD from London), July 1992.
11. Hybrid Energy Regulated Constant Gain Kalman Filter For Optimized Target Detection And Target Tracking In Wireless Sensor Networks, *Microprocessors and Microsystems* (Elsevier, communicated)
12. Medha Trivedi, Anita Yadav, "DV-HOP algorithm : Accuracy versus Fallacy", (under communication)

Conference Publications

1. Ananya Agarwal, Anita Yadav, "IoT in Rural Maternal Healthcare: India and Other developing countries", *International Conference on digital governance through IoT solutions (DigiGov-2023)*, 7 January 2023, (ISBN 978-93-5780-241-3)
2. Abhishek Bajpai, Anita Yadav, "A novel approach for secure data aggregation scheme in battlefield surveillance using elliptic curve cryptography", *International Conference on cryptology and network security in machine learning, (ICCNLS 2022)*, 16-18 December 2022. *Springer Conference*.
3. Urvashi Saraswat, Anita Yadav, "Recent Applications and challenges of Wireless Sensor Networks in Smart Grids", *7th International Conference on Engineering Research and Innovation (ICERI-2022)*, 22-23 September 2022. *Scopus, Web of Science indexed* (ISSN: 2524-7565)
4. Urvashi Saraswat, Anita Yadav, "An Updated Review on the Classification of Target Tracking Algorithms in Wireless Sensor Networks", *International Conference on Smart and Intelligent Systems (SIS 2021)*, 25-26 February 2021. *Springer Conference, Springer Book Series: Algorithms for Intelligent Systems* (ISSN: 2524-7565)

5. Maya Diwakar, Anita Yadav, "A Survey on TCP Congestion Control and Its Variants in Wireless Networks", *Proceedings of 2nd International Conference on Advance Computing and Software Engineering*, KNIT Sultanpur, 8–9 February 2019. (ISBN : 978-93-88237-44-4)
6. Maya Diwakar, Anita Yadav, "A Survey on TCP Congestion Control Mechanism for Wired and Wireless Communication", *Proceedings of National Conference on Intelligent Computing, Communication and Data Science*, pp. 16–19, HBTU Kanpur, 29–30 November 2018. (ISBN : 978-93-88237-23-9)
7. Medha Trivedi, Anita Yadav, "A Survey of RFID Localization Techniques", *Proceedings of National Conference on Intelligent Computing, Communication and Data Science*, pp. 26–28, HBTU Kanpur, 29–30 November 2018. (ISBN : 978-93-88237-23-9)
8. Sunita Yadav, Anita Yadav, "A Survey on Multi Point Relay Selection method in OLSR Routing Protocol", *Proceedings of National Conference on Intelligent Computing, Communication and Data Science*, pp. 37–40, HBTU Kanpur, 29–30 November 2018. (ISBN : 978-93-88237-23-9)
9. Indresh Kumar Gupta, Anita Yadav, "A Hybrid Genetic Algorithm and Particle Swarm Optimization (GA-PSO) Algorithm for Solving Multidimensional Knapsack Problem", *Proceedings of National Conference on Intelligent Computing, Communication and Data Science*, pp. 46–52, HBTU Kanpur, 29–30 November 2018. (ISBN : 978-93-88237-23-9)
10. Parvez Rahi, Ajay Pal Singh, Anita Yadav, "A RBF Neural Network Model for Prediction of Injury-Severity in Road Accidents", *Proceedings of National Conference on Recent Advances in Information and Communication Technologies*, pp. 1–5, HBTU Kanpur, 25–26 March 2017. (ISBN : 978-93-86256-82-9)
11. Sandeep Singh, Anita Yadav, Raghuraj Singh, "A Survey of Inbuilt DDoS Defense Mechanisms in Mainstream Operating Systems", *Proceedings of National Conference on Information Security and Cyber Laws*, pp. 167–170, HBTU Kanpur, 5–6 April 2014.
12. Anita Yadav, Akansha Malhotra, "Social Internet of Things", *Proceedings of IEEE Symposia on Internet of Things*, pp. 4–6, HBTU Kanpur, 11–12 April 2015.
13. A. K. Goyal, S. N. Baranwal, Anita Yadav, A. K. Vanvasi, "Automatic Test Activities at ITI Naini", *Proceedings of Northern Regional Conference–1990 of CSI – Manakapur Chapter on Information Technology–Key to progress*, 6–7 October 1990.
14. V. Sidlingappa, A. K. Vanvasi, Anita Yadav, "Programmable Low Frequency Oscillator", *Proceedings of 24th Annual convection of Computer Society of India*, Bangalore, 20–23 September 1989.
15. Medha Trivedi, Anita Yadav, "A performance analysis of instant messenger Andriod Apps", (under communication)
16. Maya Diwakar, Anita Yadav, "A New Slow-Start Mechanism for TCP Performance Enhancement", *International Conference on Intelligent Systems and Smart Infrastructure*, May 21-22, 2022 jointly organized by SIET Prayagraj, IET Lucknow and Manipal University Jaipur, India. (under communication)

Book Chapters Published

1. Urvashi Saraswat, Anita Yadav, "An Overview of Energy Efficient and Data Accuracy Target Tracking Methods in WSN", Bentham Science Book Chapter titled "Recent Developments in Artificial Intelligence & Communication Technologies", 2021. (ISSN:2666-2566 (Online), ISSN:2666-2558 (Print))
2. Urvashi Saraswat, Anita Yadav, "Recent Applications and Challenges of Wireless Sensor Networks in Smart Grids", (under communication).

Research Papers Presented in National/International Conferences -

1. Anita Yadav, Y. N. Singh and Raghuraj Singh, “Dynamic Power Control Wireless MAC Protocol for Adhoc Networks”, *Proceedings of National Conference on Information Security and Cyber Laws*, pp. 99–102, HBTI Kanpur, 5–6 April 2014.
2. Anita Yadav, Raghuraj Singh, Vibhas Yadav, “Security in Adhoc Networks”, *National Conference on Information Security & Mobile Computing*, ABES Engineering College, Ghaziabad, 3–4 February 2008.

Sponsored/Consultancy Projects Undertaken:

1. Consultancy project on Technical scrutiny, Evaluation and Inspection of DPR of various infrastructure and other development projects under Smart City Mission for Jhansi city. Various modules of the Smart city project are Integrated Command Control Centre, Data Centre, Web Portal, Mobile App, ERP, VMS, Surveillance, ITMS, Wi-fi, Solid waste management and etc.
Funding Agency– Jhansi Smart City Ltd.
Amount – 36.40 Lakhs + 36.40 Lakhs
Duration – 3 Years 5 months, November 2018 to March 2022.
2. Consultancy project on Evaluation and Inspection of various infrastructure and other development projects under Smart City Mission for Kanpur Nagar city. Various modules of the Smart city project are Integrated Command Control Centre, Data Centre, Web Portal, Mobile App, ERP, VMS, Surveillance, ITMS, Wi-fi, Solid waste management, digital classrooms, Smart parking, environmental monitoring and etc.
Funding Agency– Kanpur Smart City Ltd.
Amount – 86 Lakhs
Duration – 2 Years 03 months, June 2019 to September 2021.
3. Mentored Preparation and presentation of project “Improvement of Wholesale Purchase Rate at Mandi” selected for financial grant under Council of Science and Technology, U. P. (Department of Science and Technology, Govt. of U. P.), Engineering Student’s Project Grant Scheme 2019-20” of Rs. 20000/-, Students – Abhishek Gupta and Anshul Garg.
4. Consultancy project on Technical Evaluation of DPR for E-Bus Application development projects, Mobile Apps for Android & iOS and its integration in ICCC under Smart City Mission for Kanpur Nagar city.
Funding Agency – Kanpur Smart City Ltd.
Amount – 1.00 Lakhs (+18,000/- GST)
Duration – 2 months, March 2022 to April 2022.

Books published/reviewed

1. Cross Layer Optimization for Protocols in Mobile Adhoc Networks, GRIN Publishing, Germany, ISBN: 9783346270993.
2. Raghuraj Singh, Anita Yadav, Prabhat Verma, Edited Book on Proceedings of National Conference on Intelligent Computing, Communication and Data Science, NCICCD-2018.
3. Reviewed a Book on Timothy J Williams, “MCQs in Computer Science” published by Tata Mc Graw Hill, 2012.
4. Reviewed a Book on “Internet of Things” by Dr. Rajkamal published by Tata Mc Graw Hill, 2019.

Articles published

1. A. K. Goyal, Anita Yadav, “Why managers Need Smart Systems” published in Telematics India, December 1990.

2. A. K. Goyal, Anita Yadav, “Automatic Test Systems” published in Telematics India, April 1991.
3. A. K. Goyal, Anita Yadav, “Computer Virus” published in Trainer, Issue – (April – June 1991) a periodical from Training & Development Centre, I. T. I. Naini, Allahabad.
4. A, K. Goyal, Anita Yadav, “Virus Infection and the Cure” published in Telematics India, June 1991.
5. A. K. Goyal, Anita Yadav, “What Personal Computers Can’t Do” published in Telematics India, November 1991.
6. A. K. Goyal, Anita Yadav, “Future of the PCs” published in Telematics India, January 1992.
7. Anita Yadav, “Multi-core Architectures” in National Level Technical Seminar on “Multi-core Architectures”, INCORD–2008 organized by CSE Department, HBTI Kanpur during 23–24 February 2008.

Ph. D. Supervision :

In Progress :

1. Anuja Priyam, “Performance optimization of routing algorithm in MANETs”, Harcourt Butler Technical University, Kanpur.
2. Abhishek Bajpai, “An efficient data aggregation scheme for Cloud-based IoT”, Harcourt Butler Technical University, Kanpur.
3. Garima Yadav, “Improving Performance in Wireless Sensor Networks”, Harcourt Butler Technical University, Kanpur.
4. Urvashi Saraswat, “Target tracking algorithms in wireless sensor networks”, Harcourt Butler Technical University, Kanpur.
5. Medha Trivedi, “Localization in Wireless Sensor Networks”, Harcourt Butler Technical University, Kanpur.
6. Maya Diwakar, “TCP Performance Improvement in Wireless Networks with Congestion Control”, Harcourt Butler Technical University, Kanpur.