



Anita Mohanty, Ph.D.

Designation : Associate Professor

Department : Department of
Electronics & Communication Engineering
(JOINED THE INSTITUTE IN DECEMBER 2005)

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RESEARCH INTERESTS

- ✓ Vehicular Communication
- ✓ Instrumentation & Control
- ✓ IoT & Embedded System
- ✓ Sensor Technologies and applications
- ✓ Sensor Signal Processing and Interfacing

Academic Qualifications

Ph. D. (Electronics and Telecommunication Engg.), Utkal University, Odisha.

M.E. (Communication System Engineering), UCE Burla, Sambalpur University, Odisha.

B.Tech (Instrumentation and Electronics Engineering), CET, OUAT, Odisha

Teaching Experience/Industrial Experience/Research Experience

- ✓ Associate Professor in the Department of Electronics Engineering in SIT, Bhubaneswar since 19th December 2005.
- ✓ Lecturer in the Department of Electronics & Telecommunication Engineering in DRIEMS, Tangi, Cuttack from 11th October 2003 to 15th December 2005.
- ✓ Lecturer in the Department of Electronics & Telecommunication Engineering in KIIT, Bhubaneswar from 11th Dec 2001 to 4th July 2003.

PUBLICATIONS

JOURNAL ARTICLES & CONFERENCE PAPERS

- [1]. Ambarish G Mohapatra, Anita Mohanty, Ashish Khanna, Deepak Gupta, Ashit Kumar Dutta, Ahmed Alkhayyat, "Enhancing Consumer Electronics in Healthcare 4.0: Integrating Passive FBG Sensor and IoT Technology for Remote HRV Monitoring", IEEE Transactions on Consumer Electronics, 2024.
- [2]. Ambarish G. Mohapatra, Anita Mohanty, Pradyumna Kumar Tripathy, "IoT-Enabled Predictive Maintenance and Analytic Hierarchy Process Based Prioritization of Real-Time Parameters in a Diesel Generator: An Industry 4.0 Case Study", SN Computer Science, vol. 5, no. 145, 2024.

- [3]. Anita Mohanty, Subrat Kumar Mohanty, Ambarish G. Mohapatra, Sasmita Nayak, "Integrated Smart Accident Management System for Urban Traffic Congestion Alleviation and Improved Road Safety", *Tuijin Jishu/Journal of Propulsion Technology*, vol. 45, no. 2, pp.2399-2412, 2024.
- [4]. Sasmita Nayak, Anita Mohanty, Ambarish G. Mohapatra, "Enhancing Household Waste Management in Developing Municipalities: A Choice Experiment Analysis in Municipalities of India", *Tuijin Jishu/Journal of Propulsion Technology*, vol. 45, no. 1, pp. 4865-4874, 2024.
- [5]. Ambarish G. Mohapatra, Anita Mohanty, Nihar Ranjan Pradhan, Sachi Nandan Mohanty, Deepak Gupta, Meshal Alharbi, Ahmed Alkhayyat, Ashish Khanna, "An Industry 4.0 implementation of a condition monitoring system and IoT-enabled predictive maintenance scheme for diesel generators", *Alexandria Engineering Journal*, vol. 76, pp. 525-541, 2023.
- [6]. Anita Mohanty, Subrat Kumar Mohanty, Bhagyalaxmi Jena, Ambarish G. Mohapatra, Ahmed N. Rashid, Ashish Khanna, Deepak Gupta, "Identification and Evaluation of the Effective Criteria for Detection of Congestion in a Smart City," *IET Communications*, vol. 16, pp. 560-570, 2022.
- [7]. Anita Mohanty*, sudipta Mahapatra, Urmila Bhanja, "Traffic Congestion Detection In A City using Clustering Techniques In VANETs", *Indonesian Journal of Electrical Engineering and Computer Science*, vol. 13, no.3, pp. 884-891, 2019.
- [8]. Urmila Bhanja*, Anita Mohanty and Bhagyashree Das," Embedded BasedReal Time Traffic Congestion Detection, *Int. J. Vehicle Information andCommunication Systems*, vol. 3, no. 4, pp. 267-280, 2018.
- [9]. S. S. Kar, A. Mohanty*, S. K. Mohanty," Analysis of Multiplexing Techniques using LABVIEW", *International Journal of Engineering Research (IJER)*, vol. 4, Special Issue 1, pp. 36-38, Jan. 2015, ISSN (Print) 2347-5013.
- [10]. A. Mohanty*, S. S. Kar, B. Jena and M. Dehury, "Synthesis and Analysis of Analog Communication Techniques using LABVIEW," *International Journal ofElectrical, Electronics and Computer Systems (IJECS)*, vol. 2, no. 11-12, pp. 14-18, Dec. 2014. ISSN (Print) 2347-2820.
- [11]. B. Jena, M. Dehury, A. Mohanty*and S. S. Kar, "ALU Design and Its Performance Analysis in LABVIEW," *ITSI Transactions on Electrical and Electronics Engineering (ITSI-TEEE)*, vol. 2, no. 5, pp. 8-12, Nov. 2014. ISSN (Print) 2320-8945.
- [12]. A. Mohanty*, S. K. Mohanty "Wavelet Based Approach for Sensor Validation", *International Journal on Advanced Electrical and Electronics Engineering (IAEEE)*, vol.1, no.1, pp 26-32, August 2012.
- [13]. Anita Mohanty, Ambarish G. Mohapatra, Subrat Kumar Mohanty, "Exploring the Factors Influencing Customer Satisfaction in the Hotel Industry and Facilitating Decision-Making through an Analytical Hierarchy Process (AHP) Based Model", 2023 1st International Conference on Circuits, Power and Intelligent Systems (CCPIS), IEEE, Bhubaneswar, India, pp. 1-5, 2023.
- [14]. D. Nayak, A. G. Mohapatra, B. Keswani, Anita Mohanty, P. K. Tripathy, "IoT Enabled Predictive Maintenance of Diesel Generator in the Context to Industry 4.0", 19th OITS International Conference on Information Technology (OCIT-2021), IEEE, during 16-18 Dec 2021.DOI: 10.1109/OCIT53463.2021.00078
- [15]. Bhagyalaxmi Jena, Anita Mohanty, Subrat Kumar Mohanty, "Gender Recognition and Classification of Speech Signal ", *Elsevier International Conference on Smart Data Intelligent (ICSMDI 2021)*, during 29-30April 2021. Available at SSRN: <https://ssrn.com/abstract=3852607>
- [16]. Anita Mohanty, Subrat Kumar Mohanty, Bhagyalaxmi Jena, "A Real-Time Fuzzy Logic Based Accident Detection System In VANET Environment", *Proceedings of International Conference on Cognitive Informatics & Soft Computing (CISC-2020)*, *Advances in Intelligent Systems and Computing*, Springer Book Series, Vol.1317, pp. 685-696. First online: 02 July 2021, DOI <https://doi.org/10.1007/978-981-16-1056-1>

- [17]. Bhagyalaxmi Jena, Anita Mohanty, Subrat Kumar Mohanty, "Gender Recognition of Speech Signal using KNN and SVM ",Elsevier International Conference on IoT-Based Control Networks and Intelligent Systems (ICICNIS 2020), 10-11 December 2020. Available at SSRN: <https://ssrn.com/abstract=3769786>
- [18]. Anita Mohanty, Subrat Kumar Mohanty, Jitesh Kumar, "A Prototype of Density based Intelligent Traffic Light Control System Using Image Processing Technique and Arduino Microcontroller in Lab VIEW Environment ", Proceedings of International Conference on Advances In Electrical Control & Signal Systems (AECSS-2019), Springer Lecture Notes in Electrical Engineering, Vol. 665, First Online: 01 July 2020, DOI: https://doi.org/10.1007/978-981-15-5262-5_56.
- [19]. Anita Mohanty, Urmila Bhanja, Sudipta Mahapatra, "Intelligent Traffic Quantification System", Proceedings of International Conference on Advanced Material Technologies (ICAMT)-2016, IOP Conference Series: Materials Science and Engineering, vol.225, 2016. <https://doi.org/10.1088/1757-899X/225/1/012179>

ANY OTHER

BOOK CHAPTER

- [1]. Anita Mohanty, Ambarish G. Mohapatra, Subrat Kumar Mohanty, "Bridging Gaps in Patient Care With AI-DrivenIoT: Intelligent Connectivity and Patient-CentricResults", IGI Global, pp. 213-228, 2024.
- [2]. Anita Mohanty, Bhagyalaxmi Jena, Subrat Kumar Mohanty, "Real Time Density based Traffic Congestion Detection System using Image Processing and Fuzzy Logic Controller", Advanced Sensing in Image Processing and IoT,CRC Press, Taylor &Francis, pp. 1-18, 2022.<https://doi.org/10.1201/9781003221333>.
- [3]. Anita Mohanty, Subrat Kumar Mohanty, Bhagyalaxmi Jena, "VANET- based Intelligent Traffic Light Control System by Detecting Congestion using Fuzzy C-Means Clustering Technique in a Smart City", Internet of Things: Energy, Industry and Healthcare, Taylor Francis, CRC Press, pp. 1-18, 2021. <https://doi.org/10.1201/9781003140443>.
- [4]. Anita Mohanty, Subrat Kumar Mohanty, "National Education Policy 2020-Issues and Challenges", National Education Policy 2020, Kunal Publisher, pp.254-257, 2021. ISBN No. -9789391908188
- [5]. Anita Mohanty, Subrat Kumar Mohanty, "Impact of COVID-19 on Higher Education", COVID-19 and Education, Kunal Publisher, pp. 165-173, 2021. ISBN No. -9789391908058
- [6]. Sudipta Mohanty, Anita Mohanty, Ambarish G. Mohapatra, Amaresh Gantayat, Subrat K. Mohanty, Sasmita Nayak, "Soft Computing Techniques in Solar PV Energy Systems", Soft Computing in Renewable Energy Technologies, 1st Edition, CRC Press, August 2024. ISBN No.-9781003462460
- [7]. Soumik K. Mohanta, Ambarish G. Mohapatra, Anita Mohanty, Sasmita Nayak, "Deep Learning is a State-of-the-Art Approach to Artificial Intelligence", Deep Learning Concepts in Operations Research, 1st Edition, Auerbach Publications, July 2024. ISBN No.-9781003433309

CONFERENCES ATTENDED

- [1]. National Seminar on Emerging Trends in Signal Processing (ETSP-2013) held at Synergy Institute of Engineering & Technology, Dhenkanal.
- [2]. International Conference on Advanced Material Technologies (ICAMT-2016), held at Dadi Institute of Engineering & Technology, Visakhapatnam, AP.

- [3]. International Conference on "Advances in Electrical Control and Signal Systems(AECSS-2019), ITER, Siksha 'O' Anusandhan (Deemed to be University),Bhubaneswar.
- [4]. International Conference on IoT based Control Networks and Intelligent Systems(ICICNIS 2020), held at St. Joseph's College of Engineering and Technology, Kottayam, India
- [5]. International Conference on Smart Data Intelligence (ICSMDI 2021), held at Kongunadu College of Engineering and Technology at Trichy, Tamil Nadu, India.
- [6]. International Conference on Cognitive Informatics and Soft Computing (ICCISC2020), held at Balasore College of Engineering & Technology, Balasore, India
- [7]. 2021 19th OITS International Conference on Information Technology (OCIT), held at Silicon Institute of Technology, Bhubaneswar
- [8]. 2023 1st International Conference on Circuits, Power and Intelligent Systems(CCPIS), held at Silicon Institute of Technology, Bhubaneswar

PATENT GRANTED

- [1]. UK Design Patent Grant on Robot for Air Conditioner Duct Cleaning, 2023.
- [2]. UK Design Patent Grant on Soil moisture level indicator for agriculture Productionindustries,2024.

BOOK PUBLISHED

- [1]. Publish text book titled "Industrial Instrumentation" for B.Tech. Students

ACHIEVEMENTS

- [1]. Qualified GATE-2014 with 95.4 Percentile
- [2]. Received academic excellence award from ZiboZax Research Foundation, 2023.
- [3]. Received the World Class Researcher award from Record Owner in the month of December 2023.
- [4]. Best Women Faculty award-2024 from ZiboZax Research Foundation for outstanding Person.