Mrs. ARADHANA SONI

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Educational Qualification

Degree	Institute (University)	Percentage (Year of Passing)
M. Tech. (Computer Science Engineering)	KIIT University, Bhubaneswar	9.48 (2012)
B. E. (Information Technology)	Govt. Engineering College, Bilaspur (Chhattisgarh Swami Vivekananda Technical University, Bhilai)	7.76 (2010)
H.S.C. (12th)	Chhattisgarh Board of Secondary Education, Raipur	70.6% (2006)
S.S.C. (10th)	Chhattisgarh Board of Secondary Education, Raipur	73.6% (2004)

Area of interest

- Data Base Management System
- Cryptography and Network Security
- Unix
- C and C++

Software and languages

- MATLAB
- C
- C++

Experience

Assistant Professor, Department of Information Technology, Guru Ghasidas Vishwavidyalaya, Bilaspur (February2020 – Present)
Assistant Professor,
Department of Computer Science and Engineering, National Institute of Technology, Raipur (January 2016 – June2016)

Assistant Professor, Department of Computer Science and Engineering National Institute of Technology, Raipur (July 2013 – June 2014)

Achievement

- University topper in course of M Tech in Computer Science Engineering, Specialization in Computer Science & Information Security from KIIT University Bhubaneswar at 2012.

Academics Projects

- A New Hybrid Approach for Image Encryption Algorithm Using an Index Based Chaos and DNA Encoding
- Work force management system

List of publications

Journal Publications:

[1]. Ankit Kumar, Rohit Raja, Amit Kumar Dewangan, Manoj Kumar, Aradhana Soni, Dheeraj Agarwal (2025) " Next-Generation Intrusion Detection Systems: A Hybrid Machine Learning Framework for Intelligent Cyber Threat Neutralization," ournal of Network and Systems Management, https://sciety.org/articles/activity/10.21203/rs.3.rs- 5762323/v1.

[2]. Ranjana Rathore, Suhel Ahamad, Aradhana Soni, Amit Kumar Dewangan, Abhishek Jain, Agriculture Field Area Calculation Using Drone Camera: Method and Framework Design, SN Computer Science (2024), 5(2), Page 267. https://link.springer.com/article/10.1007/s42979-023-02577-4.

[3] Aradhana Soni, Prabira Kumar Sethy, Amit Kumar Dewangan, Aziz Nanthaamornphong, Santi Kumari Behera, Baishnu Devi (2024). Enhancing oral squamous cell carcinoma detection: a novel approach using improved EfficientNet architecture. BMC Oral Health 24(1) , page 601. https://doi.org/10.1186/s12903-024-04307-5

[4] Ranjeet Kumar, Anil Kumar Soni, and **Aradhana Soni**, 'Histogram-based Image Enhancement and Analysis for Steel Surface and Defects Images', Machine Vision and Augmented Intelligence—Theory and Applications, Lecture Notes in Electrical Engineering, 2021. DOI: 10.1007/978-981-16-5078-9 (In Press)(Scopus Indexed)

[5].Anil Kumar Soni, Ranjeet Kumar, Shrawan Kumar Patel and **Aradhana Soni**, 'Non-destructive fusion method for image enhancement of eddy current sub-surface defect images', Machine Vision and Augmented Intelligence—Theory and Applications, Lecture Notes in Electrical Engineering, 2021. DOI: 10.1007/978-981-16-5078-9 (In Press)(Scopus Indexed).

[6].**Aradhana Soni**& Anuja Kumar Acharya, A Novel Image Encryption Approach using an Index based Chaos and DNA Encoding and its Performance Analysis; International Journal of Computer Applications; Volume 47, Number 23; 2012 (DOI: 10.5120/7493-9944).

[7].**Aradhana Soni**& Anuja Kumar Acharya, A Hybrid Approach for Image Encryption using an Index Based Chaos and DNA Encoding, IEEE International conference on Computing, communication and networking technology (ICCCNT12 - July 26 – 28, 2012);

List of FDP and workshop attended

[1]. One week Faculty Development Programme on Sustainable Change management in technical Institutes for NEP-2020 implementation by AICTE Training and Learning (ATAL) Academy, AICTE, 23-27 August, 2021.

[2]. Faculty Development Program on "Innovation, Incubation & Research Challenges in India" held during 21/06/2021 to 25/06/2021 organized by IES College of Engineering in association with IIC, IEDC & IETE cell.

[3]. AICTE-ISTE approved Orientation/ Refresher Programme on "Emerging Trends on network & IoT" held during 16/04/2021 to 22/04/2021 organized by Infinity Management and Engineering College, Sagar, Madhya Pradesh

[4]. AICTE-ISTE approved Orientation/ Refresher Programme on "Industrial Application of MATLAB" held during 08/04/2021 to 14/04/2021 organized by Ojaswini Institute of Management & Technology, Damoh, Madhya Pradesh

[5]. UGC Sponsored "Guru Dakshta" Faculty Induction Programme (Online) from 15/02/2021 to 17/03/2021 organized by UGC-HRDC GGV Bilaspur.

[6]. Eight AICTE – NITTT, Technical Teachers orientation online course (Swayam), February 2021

[7]. One week Faculty Development Programme on Block chain by AICTE Training and Learning (ATAL) Academy, AICTE, 20-24 December, 2020.

[8]. One week Faculty Development Programme on Cyber security by AICTE Training and Learning (ATAL) Academy, AICTE, 07-11 December, 2020.

[9]. One week Faculty Development Programme on Data Sciences by AICTE Training and Learning (ATAL) Academy, AICTE, 12-16 October, 2020.

[10]. One week Faculty Development Programme on Data Sciences by AICTE Training and Learning (ATAL) Academy, AICTE, 7-11 September, 2020.

[11]. One week Faculty Development Programme on Tools and Scientific Communications for Research Article and Proposal Writing by TEQIP III, 19-23 September, 2020.

[12]. One week Faculty Development Programme on Artificial Intelligence using Python by National Youth Council of India, 14-19 September, 2020.

Administrative Responsibilities

- **1st Year Coordinator** for Department of Information Technology in SoS (E&T), GGV Bilaspur.
- **Minuets of Meeting Coordinator** for Department of Information Technology in SoS (E&T), GGV Bilaspur.

(**Aradhana Soni**)