

**Dr. Om Prakash Singh**

Assistant Professor

Department of Computer Science & Engineering,  
Indian Institute of Information Technology (IIIT) Bhagalpur✉ [opsingh.cse@iiitbh.ac.in](mailto:opsingh.cse@iiitbh.ac.in)

☎ +91 8091769503

**Academic Background**

- **Ph.D.:** Ph.D. in **Computer Science & Engineering**, **NIT Patna**, Bihar, India (2021)  
**Thesis Title:** Robust and Invisible Watermarking Techniques for Digital Images.
- **M. Tech.:** M. Tech. in **Computer Science & Engineering**, **NIT Hamirpur**, India, (2018),  
(CGPA: **7.87**).
- **B. E.:** B. E. in **Computer Science & Engineering**, **RGPV Bhopal**, India, (2015),  
(CGPA: **7.99**).

**Academic Achievements & Scholarship**

- Qualified Graduate Aptitude Test in Engineering (**GATE**): **GATE-2016**, and **GATE-2017**.
- Qualified **UGC-NET** Examination, **June 2019**, and **Dec 2019**.
- Awarded **Institute Scholarship** for M. Tech, NIT Hamirpur (2016-2018).
- Awarded **Institute Scholarship** for PhD, NIT Patna (2019-2021).

**Teaching Experience**

- Currently working as **Assistant Professor** in the CSE Department at **IIIT Bhagalpur**, Bihar, India since **2<sup>nd</sup> June, 2023**.
- Worked as **Assistant Professor** in the School of Computer Engineering, at **KIIT University**, Bhubaneswar, Odisha during **25<sup>th</sup> Nov, 2022 to 30<sup>th</sup> May, 2023**.
- Worked as **Assistant Professor (Contractual)** in CSE Department at **NIT PATNA**, Bihar, India during **13<sup>th</sup> August 2021 to 24<sup>th</sup> Nov 2022**.

**Academic Experience**

- Working as **Faculty In-Charge** of **ERP, and Web Services** at **IIIT Bhagalpur**, Bihar, India since **21<sup>st</sup> July, 2025**.
- Working as **Coordinator** of **Technical Board** at **IIIT Bhagalpur**, Bihar, India since **27<sup>th</sup> August, 2025**.
- Working as **M.Tech Advisor** of 2025 Batch in CSE Department at **IIIT Bhagalpur**, Bihar, India since **8<sup>th</sup> July, 2025**.

- Working as **M.Tech Advisor** of 2024 Batch in CSE Department at **IIIT Bhagalpur**, Bihar, India since **19<sup>th</sup> July, 2024**.
- Working as **Faculty Advisor** of B.Tech (2023-2027 Batch) students of CSE Department at **IIIT Bhagalpur**, Bihar, India since **14<sup>th</sup> August, 2023**.
- Working as **PhD Advisor** of PhD (2021, 2022, 2023 Batch) in CSE Department at **IIIT Bhagalpur**, Bihar, India since **14<sup>th</sup> August, 2023**.

## Journal Publications

[J1]	C. Mudlapur, and <b>O. P. Singh</b> , “A Review of Realistic Weather Simulation Systems in Video Games: From Scripted Skies to Dynamic Storms” IEEE Transaction on Games, vol.127, 2025 [ <b>Q2, SCIE Indexed, IF=2.8</b> ].
[J2]	<b>O. P. Singh</b> , K. N. Singh, A. K. Singh, and Brij. B. Gupta, “Metaheuristic Optimization Based Watermarking Techniques: A Comprehensive Survey, Challenges, and Research Directions” Computers and Electrical Engineering, Elsevier, vol.127, 2025 [ <b>Q1, SCIE Indexed, IF=4.9</b> ].
[J3]	<b>O. P. Singh</b> , K. N. Singh, A. K. Singh, and A. K. Agrawal, “Deep Learning-Based Image Encryption Techniques: Fundamentals, Current trends, Challenges and Future Directions” Neurocomputing, Elsevier, vol. 612, 2025. [ <b>Q1, SCIE Indexed, IF=6.5</b> ].
[J4]	N. Baranwal, K. N. Singh, <b>O. P. Singh</b> , and A. K. Singh, “DeepENC: Deep learning-based ROI selection for encryption of medical images through key generation with multimodal information fusion” IEEE Transactions on Consumer Electronics, vol. 70, no. 3, pp. 6149-6156, 2024, <a href="https://doi.org/10.1109/tce.2024.3406963">https://doi.org/10.1109/tce.2024.3406963</a> , [ <b>Q1, SCIE Indexed, IF=10.9</b> ].
[J5]	<b>O. P. Singh</b> , K. N. Singh, A. K. Singh, A. K. Agrawal, and H. Zhou, “An Improved Robust Algorithm for Optimization-based Colour Medical Image Watermarking” Computers and Electrical Engineering, Elsevier, vol. 117, pp. 1-15, <a href="https://doi.org/10.1016/j.compeleceng.2024.109278">https://doi.org/10.1016/j.compeleceng.2024.109278</a> , 2024. [ <b>Q1, SCIE Indexed, IF=4.9</b> ].
[J6]	P. Diwvedi, N. Baranwal, K. N. Singh, <b>O. P. Singh</b> , and A. K. Singh, “HIDDEN: Robust data hiding for medical images with encryption and local binary pattern” Circuits, Systems & Signal Processing, Springer, vol. 43, pp. 4439-4459, 2024. [ <b>Q3, SCIE Indexed, IF=2.0</b> ].
[J7]	<b>O. P. Singh</b> , K. N. Singh, N. Baranwal, and A. K. Singh, “HIDEmarks: Hiding multiple marks for robust medical data sharing using IWT-LSB” Multimedia Tools and Applications, vol. 83, pp. 24919–24937, 2024. <a href="https://doi.org/10.1007/s11042-023-16446-y">https://doi.org/10.1007/s11042-023-16446-y</a> [ <b>Q1, Scopus Indexed, IF=2.7</b> ].
[J8]	D. K. Mahto, <b>O. P. Singh</b> , K. N. Singh, and A. K. Singh, “Robust Copyright Protection Technique with High-embedding Capacity for Color Images” ACM Transactions on Multimedia Computing, Communications, and Applications, vol. 20, pp. 1-12, 2024. <a href="https://doi.org/10.1145/3580502">https://doi.org/10.1145/3580502</a> [ <b>Q1, SCIE Indexed, IF=5.1</b> ].
[J9]	K. N. Singh, N. Baranwal, <b>O. P. Singh</b> , and A. K. Singh, “SIELNet: 3D Chaotic Map Based Secure Image Encryption using Customized Residual Dense Spatial Network” IEEE Transactions on Consumer Electronics, vol. 69, no. 4, pp. 862-868, 2023. <a href="http://doi.org/10.1109/TCE.2022.3227401">http://doi.org/10.1109/TCE.2022.3227401</a> , [ <b>Q1, SCIE Indexed, IF=10.9</b> ].
[J10]	K. N. Singh, <b>O. P. Singh</b> , and A. K. Singh, “ECiS: Encryption prior to compression for digital image security with reduced memory” Computer Communications, Elsevier, vol. 193, pp.410-417, 2022, [ <b>Q1, SCIE Indexed, IF=4.3</b> ].

[J11]	K. N. Singh, <b>O. P. Singh</b> , N. Baranwal, and A. K. Singh, "An efficient chaos-based image encryption algorithm using real-time object detection for smart city applications", Sustainable Energy Technologies and Assessments, Elsevier, vol. 53, pp. 1-10, 2022. <a href="https://doi.org/10.1016/j.seta.2022.102566">https://doi.org/10.1016/j.seta.2022.102566</a> , [Q1, SCIE Indexed, IF=7.0].
[J12]	D. Mahapatra, P. Amrit, <b>O. P. Singh</b> , A. K. Singh, and A. K. Agrawal, "Auto encoder-CNN based embedding and extraction model for Image watermarking" Journal of electronic imaging (JEI), vol. 32, no. 02, pp.1-15, 2022. <a href="https://doi.org/10.1117/1.JEI.32.2.021604">https://doi.org/10.1117/1.JEI.32.2.021604</a> . [Q3, SCIE Indexed, IF=1.1].
[J13]	K. N. Singh, <b>O. P. Singh</b> , and A. K. Singh, "EiMOL: A Secure Medical Image Encryption Algorithm based on Optimization and the Lorenz System", ACM Transactions on Multimedia Computing Communications and Applications, vol. 19, pp. 1-19, 2022. <a href="https://doi.org/10.1145/3561513">https://doi.org/10.1145/3561513</a> , [Q1, SCIE Indexed, IF=5.1].
[J14]	<b>O. P. Singh</b> , A. K. Singh, and H. Zhou, "Multimodal fusion-based image hiding algorithm for secure healthcare system" IEEE Intelligent Systems, vol. 38, no. 4, pp. 53-61, 2022. <a href="http://doi.org/10.1109/MIS.2022.3210331">http://doi.org/10.1109/MIS.2022.3210331</a> , [Q1, SCIE Indexed, IF=6.1]
[J15]	<b>O. P. Singh</b> , A. Anand, A. K. Singh, and A. Agrawal, "Electronic Health Data Security in the Internet of Things through Watermarking: An Introduction" IEEE Internet of Things Magazine, vol. 5, no. 2, pp. 55-58, 2022. <a href="http://doi.org/10.1109/iotm.001.2100122">http://doi.org/10.1109/iotm.001.2100122</a> . [Q1, SCIE Indexed]
[J16]	K. N. Singh, <b>O. P. Singh</b> , A. K. Singh, and A. K. Agrawal, "WatMIF: Multimodal medical image fusion based watermarking for tele-health applications" Cognitive Computation, Springer, vol. 16, pp. 1947-1963, 2022, <a href="https://doi.org/10.1007/s12559-022-10040-4">https://doi.org/10.1007/s12559-022-10040-4</a> . [Q1, SCIE Indexed, IF=4.3]
[J17]	D. K. Mahto, <b>O. P. Singh</b> , A. K. Singh, "FuSIW: Fusion-based secure RGB image watermarking using hashing" Multimedia Tools and Applications, Springer, vol. 83, pp. 61493-61509, 2022, <a href="https://doi.org/10.1007/s11042-022-13454-2">https://doi.org/10.1007/s11042-022-13454-2</a> . [Q1, Scopus Indexed, IF=2.7].
[J18]	<b>O. P. Singh</b> , A. K. Singh, A. K. Agrawal, Huiyu Zhou, "SecDH: Security of COVID-19 images based on data hiding with PCA", Computer Communications, vol.191, pp. 368-377, 2022, <a href="https://doi.org/10.1016/j.comcom.2022.05.010">https://doi.org/10.1016/j.comcom.2022.05.010</a> . [Q1, SCIE Indexed, IF=4.3].
[J19]	N. Sharma, <b>O. P. Singh</b> , A. Anand and A. Singh, "Improved method of optimization-based ECG signal watermarking", Journal of Electronic Imaging, vol. 31, no. 04, pp.1-12, 2021, <a href="https://doi.org/10.1117/1.jei.31.4.041207">https://doi.org/10.1117/1.jei.31.4.041207</a> . [Q3, SCIE Indexed, IF=1.1].
[J20]	<b>O. P. Singh</b> , A. K. Singh, "A Robust Information Hiding Algorithm Based on Lossless Encryption and NSCT-HD-SVD", Machine Visions and Applications, vol. 32, no. 4, pp. 1-13, 2021, <a href="https://doi.org/10.1007/s00138-021-01227-0">https://doi.org/10.1007/s00138-021-01227-0</a> . [Q2, SCIE Indexed, IF=2.3].
[J21]	<b>O. P. Singh</b> , C. Kumar, A. K. Singh, M. P. Singh, H. Ko, "Fuzzy-based secure exchange of digital data using watermarking in NSCT-RDWT-SVD domain", Concurrency and Computation Practice and Experience, pp. 1-11, 2021, <a href="https://doi.org/10.1002/cpe.6251">https://doi.org/10.1002/cpe.6251</a> . [Q2, SCIE Indexed, IF=1.5].
[J22]	<b>O. P. Singh</b> , A. K. Singh, "Data hiding in encryption-compression domain", Complex and Intelligent Systems, vol. 9, pp. 2759–2772, 2021, <a href="https://doi.org/10.1007/s40747-021-00309w">https://doi.org/10.1007/s40747-021-00309w</a> . [Q1, SCIE Indexed, IF=4.6].
[J23]	<b>O. P. Singh</b> , A. Singh, G. Srivastava and N. Kumar, "Image watermarking using soft computing techniques: A comprehensive survey", Multimedia Tools and Applications, vol. 80, no. 20, pp. 30367-30398, 2020, <a href="https://doi.org/10.1007/s11042-020-09606-x">https://doi.org/10.1007/s11042-020-09606-x</a> . [Q1, SCIE Indexed, IF=2.75].

## Conferences

[C1]	<b>O. P. Singh</b> , and A.K. Singh, “Image Fusion-Based Watermarking in IWT-SVD Domain” Advanced Machine Intelligence and Signal Processing. Lecture Notes in Electrical Engineering, vol. 858. pp. 163-175, Springer, Singapore, 2022. <a href="https://doi.org/10.1007/978-981-19-0840-8_12">https://doi.org/10.1007/978-981-19-0840-8_12</a> .
[C2]	N. K. Yadav, A. Mohan, <b>O. P. Singh</b> , and A. K. Singh, “Digital Images Encryption using PWLCM and Sine Map” Sixth International Conference on Computational Intelligence in Communications and Business Analytics (CICBA-2024), NIT Patna, on Jan 23-25, 2024.
[C3]	S. Sinha, <b>O. P. Singh</b> , R. Mehta, and U. Biswas, “XGBoost for Novel Predictive Model to Classify Student Performance Based on Academic Metric” IEEE SILCON 2024, NIT Agartala, India, will be held on November 15-17, 2024.
[C4]	A. Pathak, <b>O. P. Singh</b> , and U. Biswas, “Predicting Chronic Kidney Disease Using Machine Learning Methodologies”, 8 <sup>th</sup> IEEE International Conference on Electronics, Materials, Engineering & Nano Technology (IEMENTech-2025), Institute of Engineering & Management (IEM), Kolkata, 31st January - 2nd February, 2025.
[C5]	N. Sinha, <b>O. P. Singh</b> , “RSDWF: Robust and Secure Dual Watermarking Framework for E-healthcare Application” 2nd International Symposium on Artificial Intelligence (ISAI-2025), NIT Sikkim, India, Springer.
[C6]	S. Sinha, <b>O. P. Singh</b> , and Ujjwal Biswas, “Fusion of AI/ML and Human-Computer Interaction in Innovative Farming” International Conference on Electrical, Electronics, Automation (E2ACON 2025), NIT Jalandhar, India, March 8-9, 2025
[C7]	A. Pathak, <b>O. P. Singh</b> , and Ujjwal Biswas, “DeepFake Image Detection using Vision Transformer” International Conference on Electrical, Electronics, Automation (ICE2A-2025), NIT Jalandhar, India, March 8-9, 2025.
[C8]	A. Pathak, <b>O. P. Singh</b> , and Ujjwal Biswas, “Efficient Image Dehazing Using an Encoder-Decoder Network with Residual Learning” International Conference on Electronics, AI and Computing (EAIC-2025), NIT Jalandhar, India, June 5-7, 2025.
[C9]	N. Sinha, <b>O. P. Singh</b> , “Robust and Secure Dual Watermarking Framework for E-healthcare Application” International Conference on Electrical, Electronics & Automation (E2ACON-2025), NIT Jalandhar, India, March 8-9, 2025.
[C10]	A. Mishra, <b>O. P. Singh</b> , U. Biswas, “Comparative analysis of 2D and 3D UNet Architectures for Brain Tumor Segmentation” 3rd International Conference on Women Researchers in Electronics and Computing (WREC-2025), NIT Jalandhar, India, April 18-19, 2025.
[C11]	J. Saxena, <b>O. P. Singh</b> , and U. Biswas, “AI-driven Transfer Learning and Ensemble Techniques in Diabetic Retinopathy Prediction” 3rd International Conference on Women Researchers in Electronics and Computing (WREC-2025), NIT Jalandhar, India, April 18-19, 2025.
[C12]	S. Sinha, <b>O. P. Singh</b> , and U. Biswas, “Innovative Farming in Digital Agricultural Services Using HCI: A Review” 3rd International Conference on Women Researchers in Electronics and Computing (WREC-2025), NIT Jalandhar, India, April 18-19, 2025.
[C13]	J. Saxena, A. Das, <b>O. P. Singh</b> , and U. Biswas, “Intelligent Skin Care(ISC): Disease Detection and Medication Guide using Deep Learning” 3rd International Conference on Women Researchers in Electronics and Computing (WREC-2025), NIT Jalandhar, India, April 18-19, 2025.

[C14]	P. P. Singh, I. Singh, <b>O. P. Singh</b> , and U. Biswas, "Intelligent Disease Visualization and Treatments to Enhance User Experience for Tomato Plant" 16th IEEE International Conference on Computing Communication and Networking Technologies (ICCCNT-2025), IIT - Indore, Madhya Pradesh, India. July 6-11, 2025.
[C15]	A. Das, <b>O. P. Singh</b> , and U. Biswas, "Deep Learning Based Soil Analysis and Intelligent Agricultural Recommendation System" 16th IEEE International Conference on Computing Communication and Networking Technologies (ICCCNT-2025) IIT - Indore, Madhya Pradesh, India, July 6-11, 2025.
[C16]	A. K. Mathura, <b>O. P. Singh</b> , S. Purkayastha, G. Krishna, and R. Priyadarshi "Enhanced Parkinson's Disease Diagnosis via Ensemble Learning on the NewHandPD Dataset" 3rd IEEE International Symposium on Sustainable Energy, Signal Processing and Cybersecurity (iSSSC 2025), GIET University, Odisha, India, November 06 - 08, 2025.
[C17]	S. Nama, M. Raj, <b>O. P. Singh</b> , and U. Biswas, "Intelligent Student Activity and Performance Monitoring System for Online Education" 3rd IEEE International Symposium on Sustainable Energy, Signal Processing and Cybersecurity (iSSSC 2025), GIET University, Odisha, India, November 06 - 08, 2025.
[C18]	S. Kumari, <b>O. P. Singh</b> , S. Purkayastha, G. Krishna, and R. Priyadarshi "Heart Disease Prediction Using Machine Learning with Optimized Feature Extraction Techniques" 3rd IEEE International Symposium on Sustainable Energy, Signal Processing and Cybersecurity (iSSSC 2025), GIET University, Odisha, India, November 06 - 08, 2025.
[C19]	A. Das, J. Sexna, <b>O. P. Singh</b> , and U. Biswas, "Intelligent Flood Sensing (IFS): Real-Time Flood Monitoring and Alert System for Farmers", 3rd IEEE International Symposium on Sustainable Energy, Signal Processing and Cybersecurity (iSSSC 2025), GIET University, Odisha, India, November 06 - 08, 2025.
[C20]	A. Das, <b>O. P. Singh</b> , S. Purkayastha, and U. Biswas, "Automated Real-Time Monitoring System for Early Plant Leaf Disease Detection Using Deep Learning", 3rd IEEE International Symposium on Sustainable Energy, Signal Processing and Cybersecurity (iSSSC 2025), GIET University, Odisha, India, November 06 - 08, 2025.
[C21]	C. Mudlapur, and <b>O. P. Singh</b> , "Enhancing Video Game Enemy AI Using Fuzzy Logic: A Comparison with Proximal Policy Optimization Model", 17th IEEE International Conference on Computational Intelligence and Communication Networks (CICN 2025), NIT Goa, India, December 20 - 21, 2025.
[C22]	<b>O. P. Singh</b> , A. Pathak, S. Purkayastha, and R. Priyadarshi, "Attention Based Dual-Branch Hybrid Network with Grad-CAM Interpretability for Glaucoma Detection", 17th IEEE International Conference on Computational Intelligence and Communication Networks (CICN 2025), NIT Goa, India, December 20 - 21, 2025.
[C23]	<b>O. P. Singh</b> , A. Pathak, S. Purkayastha, and U. Biswas, "Quantum-Enhanced Brain Tumor Classification Using Deep Feature Extraction and ANN-Based Compression", 17th IEEE International Conference on Computational Intelligence and Communication Networks (CICN 2025), NIT Goa, India, December 20 - 21, 2025.
[C24]	S. Purkayastha, S. Patel, <b>O. P. Singh</b> , and S. Tiwari, "RFM Analysis for Enhanced Marketing Strategies Using Logarithmic Transformation", 17th IEEE International Conference on Computational Intelligence and Communication Networks (CICN 2025), NIT Goa, India, December 20 - 21, 2025.

## Book Chapter

[BC1] K. N. Singh, **O. P. Singh**, A. K. Agrawal and A. K. Singh “Secure medical image encryption algorithm for e-healthcare applications” In: Singh and Zhou (eds) Medical Information Processing and Security Techniques and applications, The IET Book Series on e-Health Technologies, pp. 1-30, [https://doi.org/iet\\_books.78594.016](https://doi.org/iet_books.78594.016), 2022.

[BC2] N. Sharma, **O. P. Singh**, A. Anand and A. K. Singh “ECG-based dual watermarking scheme for healthcare applications” In: Singh and Zhou (eds) Medical Information Processing and Security Techniques and applications, The IET Book Series on e-Health Technologies, pp. 1-15, [https://doi.org/iet\\_books.78594.016](https://doi.org/iet_books.78594.016), 2022.

[BC3] **O. P. Singh**, K. N. Singh, A. K. Agrawal, and A. K. Singh, “Robust watermarking algorithm based on multimodal medical image fusion” In: Singh and Berretti (eds) Data Fusion Techniques and Applications for Smart Healthcare, Book Series - Intelligent Data-Centric Systems: Sensor Collected Intelligence, Elsevier, 2024.

[BC4] **O. P. Singh**, K. N. Singh, and A. K. Singh, “Watermarking with blockchain A survey” In: Singh and Berretti (eds) Data Fusion Techniques and Applications for Smart Healthcare, Book Series - Digital Image Security, CRC Press, 2024.

[BC5] S. Sinha, O. P. Singh, and U. Biswas, “AI-powered analytics and HCI methods for multimodal data fusion in precision agriculture” Multimedia and Multimodal AI in Precision Agriculture: Practices, Challenges, and Applications, 2025.

### Editorial Board Members:

- Scientific Reports
- Discover Computing

### Professional Services:

#### Reviewer in Journal (SCI/SCIE):

- IEEE Transactions on Artificial Intelligence
- IEEE Transactions on Circuit and Systems for Video Technology
- IEEE Transactions on Industrial Informatics
- IEEE Transactions on Computational Social Systems
- IEEE Transactions on Multimedia
- IEEE Transactions on Consumer Electronics
- IEEE Transactions on Intelligent Transportation Systems
- IEEE Intelligent Systems
- IEEE Journal of Biomedical and Health Informatics
- IEEE Internet of Things Journal
- IEEE Access
- ACM Transactions on Multimedia Computing, Communications and Applications
- Computers & Electrical Engineering, Elsevier
- Computer Communication, Elsevier
- Expert Systems with Applications, Elsevier
- Applied Soft Computing, Elsevier



- Signal Processing: Image Communication, Elsevier
- Journal of Information Security and Applications, Elsevier
- Engineering Applications of Artificial Intelligence, Elsevier
- Cyber Security and Applications, Elsevier
- Information Fusion, Elsevier
- Physical Communication, Elsevier
- International Journal of Cognitive Computing in Engineering, Elsevier
- Neurocomputing, Elsevier
- Pattern Recognition, Elsevier
- Knowledge-Based Systems, Elsevier
- Information Processing & Management, Elsevier
- Biomedical Signal Processing and Control, Elsevier
- Information Sciences, Elsevier
- Neural Computing and Applications, Springer
- Journal of Ambient Intelligent and Humanized Computing, Springer
- Cluster Computing, Springer
- International Journal of Information Security, Springer
- Multimedia Systems, Springer
- The Journal of Supercomputing, Springer
- Optical and Quantum Electronics, Springer
- Multimedia Tools and Applications, Springer
- Earth Science Informatics, Springer
- Signal, Image and Video Processing, Springer
- Artificial Intelligence Review, Springer
- Discovery Computing, Springer
- Scientific Reports, Nature
- Applied Physics B, Springer
- IET Image Processing
- Journal of Electronic Imaging, SPIE
- International Journal of Computers and Applications, [Taylor & Francis](#)
- The Imaging Science Journal, [Taylor & Francis](#)
- Applied Computational Intelligence and Soft Computing, Hindwai
- International Journal of Information Security and Privacy, IGI Global
- International Journal of Knowledge and Systems Science (IJKSS), IGI Global
- IEICE Transactions on Information and Systems
- Iraqi Journal for Computer Science and Mathematics

#### **Reviewer in International Conferences:**

- 29<sup>th</sup> International Conference on Neural Information Processing (ICONIP-22), November 22-26, 2022, New Delhi, India.
- 3<sup>rd</sup> IEEE International Conference on Advances in Computing, Communication Control and Networking (ICAC3N-21), December 17-18, 2021, Greater Noida, India.
- IEEE International Conference on Computing, Communication, and Intelligent Systems (ICCCIS-2022), Nov 04-05<sup>th</sup>, 2022 in Greater Noida, Sharda University, India.

- 1<sup>st</sup> International Conference on Recent Developments in Cyber Security (ReDCySec-2023) during June 16-17th, 2023 in Greater Noida, Sharda University, India.
- International Conference on Intelligent and Smart Computation (ICIASC-2023), July 07-08<sup>th</sup> 2023, Chandigarh University, Campus – Gharuan, Mohali, Punjab, India
- 1<sup>st</sup> International Conference on Computational Intelligence, Networks and Security (ICCINS2023), December 22-23, 2023, Lakireddy Bali Reddy College of Engineering, Mylavaram, AP, India.
- 13<sup>th</sup> International Conference on Electronics, Communications and Networks (CECNet- 2023) will be held on November 17-20, 2023 in Macao, China.
- IEEE International Conference on Computing, Communication, and Intelligent Systems (ICCCIS-2023) will be held during Nov 03-04th, 2023 in Sharda University, India.
- 3<sup>rd</sup> International Conference on Emerging Frontiers in Electrical and Electronic Technologies (ICEFEET- 2023), at the Department of Electrical Engineering, National Institute of Technology Patna during 21-22, December, 2023.
- 1<sup>st</sup> International Conference on Advancement in Computation & Computer Technologies (InCACCT-2023), May, 05-06<sup>th</sup> 2023, Chandigarh University, Mohali, Punjab, India.
- 5<sup>th</sup> International Conference on Machine Learning, Image Processing, Network Security and Data Sciences (MIND-2023), NIT Hamirpur, H.P, India, during 21<sup>th</sup> -22<sup>th</sup> December, 2023.
- 4<sup>th</sup> International Conference on Advances and Applications of Artificial Intelligence and Machine Learning (ICAAAIML-2023), Sharda University, 28<sup>th</sup> -29<sup>th</sup> December, 2023.
- 6<sup>th</sup> International Conference on Computational Intelligence in Communications and Business Analytics (CICBA-2024), will be organized by Department of Computer Science & Engineering, National Institute of Technology, Patna during January 23-25, 2024.
- 5<sup>th</sup> International Conference on Innovative trends in Information Technology (ICITIIT-2024) Kottayam, Kerala, India will be held on 15<sup>th</sup> -16<sup>th</sup> march 2024.
- 2<sup>nd</sup> International Conference on Advancement in Computation & Computer Technologies (InCACCT-2024), May, 02-03<sup>th</sup> 2024, Chandigarh University, Mohali, Punjab, India.
- 3<sup>rd</sup> International conference on Advanced Communication and Intelligent Systems (ICACIS) is Jointly organized by Jawaharlal Nehru University (JNU), New Delhi, and Warsaw Management University, Poland on May 16-17, 2024 at JNU New Delhi, India.
- 2<sup>nd</sup> International Conference on Recent Developments in Cyber Security (ReDCySec-2024) during June 30-31 May, 2024 in Greater Noida, Sharda University, India.
- 4th International Conference on Electrical, Computer and Energy Technologies (ICECET) Sydney, Australia on 25-27<sup>th</sup> July 2024.
- 9<sup>th</sup> International Conference on Computer Vision & Image Processing (CVIP) will be held at Indian Institute of Information Technology Design and Manufacturing, Kancheepuram (IIITDM Kancheepuram), Chennai, Tamil Nadu, INDIA from December 19-21, 2024.
- IEEE International Conference on Electrical, Electronics, and Computing Technologies (ICEECT-2024) will be conducting on during 29<sup>th</sup> to 31<sup>st</sup> August, 2024 Department of Electrical Electronics and Communication Engineering, Sharda University, India.
- 31<sup>st</sup> International Conference on Neural Information Processing (ICONIP 2024) is set to be held in Auckland, New Zealand, from December 2 to December 6, 2024.
- International Conference on Data Science and Communication (ICTDSC - 2024) will be held in Siliguri Institute of Technology, Darjeeling, West Bengal, India on November 21-22, 2024.
- 8<sup>th</sup> International Conference on Data Science and Management of Data (CODS-COMAD Dec'24) will be hosted at IIT Jodhpur, India on 18<sup>th</sup>-21<sup>th</sup> December, 2024.



- 22<sup>nd</sup> OCIT (OITS International Conference on Information Technology) will be held at SRM University, AP, India, December 12-14, 2024.
- 18<sup>th</sup> IEEE-RIVF (International Conference on Computing and Communication Technologies), School of Computer Science, Duy Tan University, Da Nang, VietNam, December 21-23, 2024
- 1st International Conference on Sustainable Computing and Intelligent Systems (ICSCIS 2025) March 21-22, 2025, Poornima University, Jaipur, India.
- 3<sup>rd</sup> International Conference on Advancement in Computation & Computer Technologies (InCACCT-2025), Department of Computer Science and Engineering, Chandigarh University, India, 17th-18th April 2025.
- 12<sup>th</sup> International Conference on Signal Processing and Integrated Networks 12th International (SPIN 2025), Department of Electronics and Communication Engineering, Amity University, Sec-125, Noida, Delhi-NCR, India, 20-21 February 2025.
- 15<sup>th</sup> International Conference on Cloud Computing, Data Science and Engineering (CONFLUENCE), Amity School of Engineering & Technology, Uttar Pradesh, India, 16<sup>th</sup> - 17<sup>th</sup> January 2025.
- International Conference on Robotics, Communication and Soft Computing (IRCSC), National Institute of Technology Sikkim, Sikkim, India, 10th - 12th April 2025.
- 17th IEEE International Conference on Computational Intelligence and Communication Networks (CICN 2025), NIT Goa, India, December 20 - 21, 2025.
- 3rd IEEE International Symposium on Sustainable Energy, Signal Processing and Cybersecurity (iSSSC 2025), GIET University, Odisha, India, November 06 - 08, 2025.

#### **Session Chair in International Conferences:**

- Session Chair of 29<sup>th</sup> International Conference on Neural Information Processing (ICONIP22), November 22-26, 2022 New Delhi, India.
- Session Chair of Sixth International Conference on Computational Intelligence in Communications and Business Analytics (CICBA-2024), NIT Patna. Bihar, India, during 23<sup>th</sup> -25<sup>th</sup> January, 2024.

#### **Short Term Course, and Faculty Development Program**

- [1] Attended Short Term Course on “Security Trends in Mobile Ad-Hoc Sensor System (STMASS-2018)” from 15-20<sup>th</sup> March, 2018 at NIT Hamirpur.
- [2] Participated in Faculty Development Program (FDP) on “Artificial Intelligence” From 2-6<sup>th</sup> December, 2019 at NIT Patna.
- [3] Participated in Faculty Development Program (FDP) on “Multimedia and Security” from 16<sup>th</sup> -20<sup>th</sup> December, 2020 at NIT Patna.
- [4] Participated in Online Training Programme on “Advanced Optimization Techniques and hands-on with MATALAB/SCILAB” from 6-17<sup>th</sup> September 2021 at NIT Patna.

## Research Supervision

### PhD Supervision:

S. No.	Name of Scholar	Thesis Topic	Status	Date of Admission	Affiliation
1	Neha Sinha (2203005)	Watermarking Techniques for Medical Images	State of Art is completed	16 <sup>th</sup> August, 2022	IIIT Bhagalpur
2	Nikhil Kumar (250301002)	Application of Deep Learning Model in Agriculture Sector	Course Work is Completed	08 <sup>th</sup> August, 2025	

### M.Tech Supervision:

S. No.	Name of Scholar	Thesis Topic	Status	Affiliation
1	Robin Newton (2202008)	Steganography Techniques for Digital Images	Awarded (24 June 2024)	IIIT Bhagalpur
2	Abhijeet Mishra (230201001)	Medical Image Segmentation using Deep Learning Model	Awarded (26 June 2025)	
3	Saurav Kumar (230201005)	Underwater Image Enhancement using Deep Learning Model	Awarded (26 June 2025)	
4	Sweta Sinha (230201006)	Designing AI-Enabled Innovative Digital Agricultural System Using Human Centered Design	Awarded (26 June 2025)	
5	Chetan Mudlapur (240201008)	Designing 3D Games using Soft Computing Approach	Course Work is Completed	
6	Anup Kumar (240201009)	Application of Quantum Computing in Image Encryption	Course Work is Completed	
7	Nitesh Kumar (240201010)	Satellite image Enhancement using Deep Learning	Course Work is Completed	
8	Satyakam Kanth (250201004)	Medical Image Analysis using Quantum Computing	Course Work is Completed	
9	Shaliesh Kumar Pal (250201008)	Application of Deep Learning in Parkinson Disease Detection	Course Work is Completed	
10	Monika Kumari (250201009)	Diabetic Foot Ulcer Detection Using Deep Learning Model	Course Work is Completed	

## Area of Interest

- Information Security
- Image and Video Processing
- Cyber Security

## References

### Dr. Amit Kumar Singh (Ph.D. Supervisor)

Associate Professor

Department of Computer Science & Engineering

National Institute of Technology Patna, 800005, Bihar, India

Phone: +91 9816639203

Email: [amit.singh@nitp.ac.in](mailto:amit.singh@nitp.ac.in)

**Prof. Sanjay Kumar Singh**

Professor & HoD

Department of Computer Science and Engineering

Indian Institute of Technology (BHU), Varanasi, 221005, UP, India

Phone: +91 9554321133

Email: [sks.cse@iitbhu.ac.in](mailto:sks.cse@iitbhu.ac.in)

**Prof. Gaurav Bhatnagar**

Professor

Department of Mathematics

Indian Institute of Technology Jodhpur, 342037, Rajasthan, India

Phone: +919610170658

Email: [goravb@iitj.ac.in](mailto:goravb@iitj.ac.in)

**Declaration:**

I hereby declare that all the statements made above are true to the best of my knowledge and belief.

**Om Prakash Singh**

**Last updated:** 20<sup>st</sup> Dec, 2025