Research Profile Ids

ORCID ID : 0000-0003-4112-2365

SCOPUS ID : 36952253500 Web of Science Researcher ID : ABC-8694-2020

Vidwan Id : 392296

Google Scholar Id : CC-rX0UAAAAJ

List of Publications

Journal Publications

Sl. No. Details of Published Articles

- Kambham Pratap Joshi, Vishruth Boraiah Gowda, Parameshachari Bidare Divakarachari, Paramesh Siddappa Parameshwarappa, Raj Kumar Patra, "VSA-GCNN: Attention Guided Graph Neural Networks for Brain Tumor Segmentation and Classification." Big Data and Cognitive Computing, 9(2), 29, 2025, ISSN: 2504-2289. https://doi.org/10.3390/bdcc9020029 (SCI Journal (Q2), Impact Factor 3.7)
- K.B.V.Brahma Rao, Naresh Kumar Kar, Kamal K. Mehta, Mohan Awasthy, Srinivas Konda, Raj Kumar Patra, "A novel pulmonary emphysema detection using Seg-ResUnet-based abnormality segmentation and enhanced heuristic algorithm-aided deep learning", Expert Systems with Applications, Volume 268, 2025, 126250, ISSN 0957-4174, https://doi.org/10.1016/j.eswa.2024.126250. (SCI Journal (Q1), Impact Factor 7.5)
- Nuthanakanti Bhaskar, Jangala Sasi Kiran, Suma Satyanarayan, Gaddam Divya, Kotagiri Srujan Raju, Murali Kanthi, **Raj Kumar Patra**, "An approach for liver cancer detection from histopathology images using hybrid pre-trained models" in **TELKOMNIKA Telecommunication**, **Computing**, **Electronics and Control**, Vol. 22, No. 2, pp. 401-412, April 2024, ISSN: 1693-6930. DOI: 10.12928/TELKOMNIKA.v22i2.25588 (**Scopus Journal**)
- Bokkena Srihitha, Peddauppari Sai Kiran, Kukka Sunil, **Raj Kumar Patra**, "Phishing Website Detection using Machine Learning Algorithms" in The Indian Journal of Technical Education, Vol. 46, Special Issue, pp. 173-178, November 2023, ISSN: 0971-3034. (**UGC Care Journal**)
- Ashok Bhansali, **Raj Kumar Patra**, P. B. Divakarachari, P. Falkowski-Gilski, G. Shivakanth and S. N. Patil, "CNN-CLFFA: Support Mobile Edge Computing in Transportation Cyber Physical System," in IEEE Access, vol. 12, pp. 21026-21037, 2024, ISSN: 2169-3536 doi: 10.1109/ACCESS.2024.3361837. (**SCI Journal (Q1), Impact Factor 3.9**)
- Ashok Bhansali, **Raj Kumar Patra**, Mohamed Abouhawwash, S. S. Askar, Mohan Awasthy, K. B. V. Brahma Rao, "Level-set based adaptive-active contour segmentation technique with long short-term memory for diabetic retinopathy classification" in Frontiers in Bioengineering and Biotechnology, Vol. 11, pp. 1-18, December 2023, ISSN: 2296-4185, doi: 10.3389/fbioe.2023.1286966. (**SCI Journal (Q1), Impact Factor 5.7**)
- G. S. Nijaguna, N. D. Lal, P. B. Divakarachari, R. P. d. Prado, M. Woźniak and R. K. Patra, "Feature Selection Using Selective Opposition Based Artificial Rabbits Optimization for Arrhythmia Classification on Internet of Medical Things Environment," in IEEE Access, vol. 11, pp. 100052-100069, September 2023,

- ISSN: 2169-3536, doi: 10.1109/ACCESS.2023.3312537. (SCI Journal (Q1), Impact Factor 3.557)
- Raj Kumar Patra, Sujata N. Patil, Przemysław Falkowski-Gilski, Zbigniew Łubniewski, Rachana Poongodan, "Feature Weighted Attention—Bidirectional Long Short Term Memory Model for Change Detection in Remote Sensing Images." MDPI Remote Sensing, October 2022, Vol. 14, Issue 21, 5402. pp. 1-21. ISSN 2072-4292. https://doi.org/10.3390/rs14215402 (SCI Journal (Q1), Impact Factor 5.349)
- Leo Gertrude David, **Raj Kumar Patra**, Przemysław Falkowski-Gilski, Parameshachari Bidare Divakarachari, Lourdusamy Jegan Antony Marcilin, "Tool Wear Monitoring Using Improved Dragonfly Optimization Algorithm and Deep Belief Network." MDPI Applied Sciences 2022, August 2022, Vol. 12, Issue 16, 8130. pp. 1-18. ISSN: 2076-3417. https://doi.org/10.3390/app12168130 (**SCI Journal (Q2), Impact Factor 2.838**)
- B. Kavitha Rani, M. Varaprasad Rao, **Raj Kumar Patra**, K. Srinivas, G. Madhukar, "Vehicle type classification using graph ant colony optimizer based stack autoencoder model, Multimedia Tools and Applications," Vol. 81, Issue 29, July 2022, pp. 42163-42182, ISSN: 1573-7721, https://doi.org/10.1007/s11042-021-11508-5. (SCI Journal (Q1), Impact Factor 2.577)
- D. Sunitha, **Raj Kumar Patra**, N.V. Babu, A. Suresh, Suresh Chand Gupta, "Twitter sentiment analysis using ensemble based deep learning model towards COVID-19 in India and European countries," Pattern Recognition Letters, Vol. 158, pp. 164-170, April 2022, ISSN: 0167-8655. https://doi.org/10.1016/j.patrec.2022.04.027 (**SCI Journal (Q1), Impact Factor 2.81**)
- Raj Kumar Patra, M. Hema Kumar, Kalyanapu Srinivas, P. Chandra Sekhar, S.J. Subhashini, "User-segregation based channel estimation in the MIMO system," Elsevier Physical Communication, Volume 56, 2023, 101971, pp. 1-13, ISSN 1874- 4907, https://doi.org/10.1016/j.phycom.2022.101971 (SCI Journal (Q2), Impact Factor: 2.379)
- R. K. Patra, T. S. Sinha, R. P. Dubey, "Extraction of geometric and prosodic features from human-gait-speech data for behavioural pattern detection: Part I," TURKISH JOURNAL OF ELECTRICAL ENGINEERING & COMPUTER SCIENCES, July 2017, Vol. 25, No. 4, pp 2820-2830. ISSN: 1303-6203, DOI: https://doi.org/10.3906/elk-1604-437 (SCI Journal, Impact Factor 0.853)
- N. Bhaskar, Ganashree T. S., **Raj Kumar Patra**, "Pulmonary Lung Nodule Detection and classification through Image Enhancement and Deep Learning," International Journal of Biometrics, March 2023, Vol. 15, No. 3/4, pp. 291-313. ISSN: 1755-8301. https://doi.org/10.1504/IJBM.2023.130637 (**ESCI and Scopus Journal (Q4)**)
- Ramakant Chandrakar, Rohit Raja, Rohit Miri, **Raj Kumar Patra**, Upasana Sinha, "Computer Succored Vaticination of Multi-Object Detection and Histogram Enhancement in Low Vision," International Journal of Biometrics. March 2023, Vol. 15, No. 3/4, pp. 255-271. ISSN: 1755-8301. https://doi.org/10.1504/IJBM.2023.130671 (**ESCI and Scopus Journal (O4)**)
- Tilendra Shishir Sinha, **Raj Kumar Patra**, and Rohit Raja, "A Comprehensive analysis of human gait for abnormal foot recognition using Neuro-Genetic approach," International Journal of Tomography and Statistics (IJTS), vol. 16, no. W11, pp. 56-73, Winter 2011. http://ceser.res.in/ceserp/index.php/ijts (**Scopus Journal**)

- 17 **R. K. Patra**, T. S. Sinha, R. P. Dubey, "A Comprehensive Investigation of Muscle Activations and Contractions for Behavioural Trait Detection through Human-Gait using Soft-Computing Technique," Jan. 2015, AMSE Journals 2014-Series: Modelling C, Vol. 75, No. 1, pp 100-119. ISSN: 1240-4535 (**Scopus Journal**)
- 18 **R. K. Patra**, T. S. Sinha, R. P. Dubey, "An Empirical Analysis on Coincident point of 1D and 2D data for Behavioural Pattern Detection," International Journal of Engineering and Future Technology (IJEFT), Vol. 7, No. 7, pp 1-17, ISSN 2455-6432.
- Rohit Raja, Tilendra Shishir Sinha, **Raj Kumar Patra**, Shrikant Tiwari, Physiological Trait Based Biometrical Authentication of Human-Face Using LGXP and ANN Techniques, International Journal of Information and Computer Security (IJICS), 2018, Vol. 10, No. 2/3, pp 303-320, ISSN 1744-1773. (**Scopus Journal**)
- Rohit Raja, **Raj Kumar Patra**, T. S. Sinha, Extraction of Features from Dummy faces for Improving Biometrical Authentication of Human, International Journal of Luminescence and Applications, December 2017, Vol. 7, No. 3-4, pp 507-512, ISSN 2277-6362.
- Ch. Manimadhavi, **Raj Kumar Patra**, Cloud Storage Using Operation Record Table and Data Integrity Verification, INTERNATIONAL JOURNAL OF RESEARCH IN ELECTRONICS AND COMPUTER ENGINEERING (IJRECE), 2018, Vol. 6, No. 3, pp. 565-569. ISSN 2348-2281.
- G. R. Sinha, Srujan K. Raju, **Raj Kumar Patra**, Daw Win Aye, Daw Thuzar Khin, Research Studies on Human Cognitive Ability, International Journal of Intelligent Defense support System (IJIDSS), May 2019, Vol. 5, No. 4, pp. 298-304, ISSN: 1755-1595. Doi: 10.1504/IJIDSS.2018.099891 (**Scopus Journal**)
- K. Srinivas, B. Kavitha Rani, M. Vara Prasad Rao, **Raj Kumar Patra**, G.Madhukar, A. Mahendar, Prediction Of Heart Disease Using Hybrid Linear Regression, European Journal of Molecular & Clinical Medicine, December 2020, Vol. 07, Issue 05, pp. 1159-1171, ISSN 2515-8260. https://ejmcm.com/issue-content/prediction-of-heart-disease-using-hybrid-linear-regression-8870 (**Scopus Journal**)
- Astha Srivastava, Rohit Miri, **Raj Kumar Patra**, AN EFFICIENT MODEL TO DETECT SOCIAL NETWORK MENTAL DISORDERS USING MACHINE LEARNING TECHNIQUES, European Journal of Molecular & Clinical Medicine, December 2020, Vol. 07, Issue 11, pp. 2081-2091, ISSN 2515-8260. (**Scopus Journal**)
- Md Rashid Mahmood, **Raj Kumar Patra**, Kamal Mehta, Swati Jain, Ashwala Mohan, A Modified System for Facial Expression Recognition and Head Pose Estimation Techniques, SAMRIDDHI: A Journal of Physical Sciences, Engineering and Technology, 2020, Vol.12, Special Issue (3), 197-202. ISSN: 2454-5767. (UGC Care Journal)
- Md Rashid Mahmood, Kamal Mehta, **Raj Kumar Patra**, Swati Jain, Grid based Multiple Features Image Mosaicing, SAMRIDDHI: A Journal of Physical Sciences, Engineering and Technology, 2020, Vol.12, Special Issue (3), 203-210, ISSN: 2454-5767. https://doi.org/10.18090/samriddhi.v12iS3.28 (**UGC Care Journal**)
- V Rama Raju, K Srinivas, B Kavitha Rani, G Madhukar, Anji Reddy, M Varaprasad Rao, **Raj Kumar Patra**, BoTox in writer's cramp: A study with multiunit multichannel electromyographic EMG signal recording, IP International

- Journal of Aesthetic and Health Rejuvenation, July-September, 2021; Vol. 4, Issue 3, pp. 51-56.
- V R Raju, B. K. Rani, K. Srinivas, M. Varaprasad Rao, **Raj Kumar Patra**, G. Madhukar, D Anji Reddy, Measures of dispersion of WCs EMG waveforms variability: A study with automatic multi-channel guided low-cost high-speed electromyography, IP International Journal of Aesthetic and Health Rejuvenation, July-September, 2021;Vol. 4, Issue 3,pp. 57-60.

Conference Publications

Sl. No. Details of Published Articles

- Raj kumar Patra, Rohit Raja and Tilendra Shishir Sinha, Modeling and Simulation of GAIT for Abnormal Foot Recognition using Neuro-Genetic Approach, In the proceedings of Emerging Principles and Practices of Computer Science and Information Technology (EPPCSIT09) Vol. 2, pp. 416-421, held at Guru Nanak Dev Engineering College, Ludhiana, 4th 5th September, 2009, ISBN 81-89651-36-6.
- Rohit Raja, **Raj kumar Patra** and Tilendra Shishir Sinha, A Side-View extraction of features for Automatic Face Recognition using Neuro- Genetic Approach. In the proceedings of Emerging Principles and Practices of Computer Science and Information Technology (EPPCSIT09) Vol. 2, pp. 119-123, held at Guru Nanak Dev Engineering College, Ludhiana, 4th 5th September, 2009, ISBN 81-89651-36-6.
- Raj kumar Patra, Rohit Raja and Tilendra Shishir Sinha, Anomaly in Foot Recognition through human gait using Hybrid Approach, in the proceedings of International Conference of Systemics, Cybernetics and Informatics (ICSCI 2010) held at Pentagram Research Centre Private Limited, Hyderabad, India, pp.112-117, 27th 30th Jan 2010.
- Rohit Raja, **Raj kumar Patra** and Tilendra Shishir Sinha, Soft-Computing Based Modeling and Simulation for Face Identification from Side-View, In the proceedings of **International Conference** of Systemics, Cybernetics and Informatics (ICSCI 2010) held at Pentagram Research Centre Private Limited, Hyderabad, India, pp. 106-111, 27th 30th Jan 2010.
- Raj kumar Patra, Rohit Raja and Tilendra Shishir Sinha, Analysis and Recognition of Anomaly in foot through Human Gait using Neuro-Genetic approach, In the proceedings of 4th International Conference on Computer Applications in Electrical Engineering Recent Advances (CERA-09), held on 19th 21st February 2010 at IIT, Roorkee.
- Rohit Raja, **Raj kumar Patra** and Tilendra Shishir Sinha, Modelling and Simulation of face from side-view for Biometrical Authentication using Hybrid approach, In the proceedings of **4**th **International Conference** on Computer Applications in Electrical Engineering Recent Advances (CERA-09), held on 19th 21st February 2010 at IIT, Roorkee.
- **Raj kumar Patra**, Kiran Chhabra and Akansha Choubey, Virtual Reality in real World, in the proceedings of Recent Trends & Development in Computer Technology in (Techno-vision 2007), pp. 134-137, organized by Shri Shankaracharya College of Engineering and Technology, Bhilai, on 26th -27th October 2007.
- 8 **R. K. Patra**, T. S. Sinha, R. P. Dubey, A Comprehensive Study and analysis of Muscle Activation and Contractions through Human-Gait Images using Soft-

- Computing Techniques, 16-17 Dec. 2013, In the Proceedings of International Conference on Cyber Security, Smart Grid Computing, and Environmental Protection Technologies, held at ITM University, Raipur, pp 79-89, ISBN: 978-81-924498-0-7.
- Saurabh Agrawal, Raj Kumar Patra, Tilendra Shishir Sinha, Modeling and Simulation of Fliage Images for Sustainable Development of Human-kind for Promoting Environmental Protection using Neuro-Fuzzy Approach, 16-17 Dec. 2013, In the Proceedings of International Conference on Cyber Security, Smart Grid Computing, and Environmental Protection Technologies, held at ITM University, Raipur, pp 66-78, ISBN: 978-81-924498-0-7.
- 10 **R. K. Patra**, T. S. Sinha, R. P. Dubey, Detection of behavioural pattern through human-gait image using soft-computing technique, Jan. 2015, In the Proceedings of the IEEE International Conference on Electrical, Electronics, Signals, Communication and Optimization (EESCO 2015), Held at Vignan's Institute of Information Technology, Visakhapatnam, pp 1-6, ISBN: 978-1-4799-7679-9, doi: 10.1109/EESCO.2015.7253750
- Rohit Raja, **Raj kumar Patra**, T. S. Sinha, Extraction of Features from Dummy face for improving Biometrical Authentication of Human, In the proceedings of National Conference on Signal Processing Sustainable Energy Material and Astronomy and Astrophysis (NSSEMA-2017), 28-31 March 2017, pp 1-6.
- Raj Kumar Patra, Rohit Raja, Tilendra Shishir Sinha, Extraction of geometric and prosodic features from human-gait-speech data for behavioural pattern detection: Part II, In the proceedings of the First International Conference on Advanced Computational and Communication Paradigms (ICACCP-2017), Springer AISC Series, Vol. 706, pp 267-278, 8-10 Sept. 2017, pp 1-10. (Scopus) ISBN: 978-981-10-8237-5.
- G. R. Sinha, Rohit Raja, **Raj Kumar Patra**, Fuzzy Inference System for Efficient Lung Cancer Detection, In the proceedings of the international Conference on Information Systems and Management Science, held at University of Malta, Valletta, 22-23 February 2018.
- Rohit Raja, Raj kumar Patra, G R Sinha and Su Su Hlaing, Empirical Analysis for Detection of Occlusion in faces using Soft Computing Technique, in the proceedings of the International Conference on Communication, Security and Optimization of Decision Support Systems (IC-CSOD 2018), held at Thakur College of Engineering and Technology, Mumbai, Maharastra, India, 23-24 February 2018.
- Rashid Mahmood, Rohit Raja, Raj Kumar Patra, A Novel Approach for Weather Prediction using Forecasting Analysis and Data Mining Techniques, In the proceedings of 7th International conference on Innovations in Electronics and Communication Engineering (ICIECE 2018), Springer LNNS Series, Vol. 65, pp 479-489, held at Guru Nanak Institute of Technology, Hyderabad, India,27-28 July 2018. ISBN: 978-981-13-3765-9 (**Scopus**)
- Raj Kumar Patra, Rohit Raja, Rashid Mahmood, Tilendra Shishir Sinha, Image Registration and Rectification using Background subtraction method for Information Security to justify Cloning Mechanism using High-end Computing Techniques, In the Proceedings of the 3rd International Conference on Computational Intelligence and Informatics (ICCII 2018), Springer AISC Series, Vol. 1090, pp 829-837, held at JNTU College of Engineering, Hyderabad, India, 28 29 December 2018. ISBN 978-981-15-1480-7. (Scopus)

- Somasekhar G., Raj Kumar Patra, Srujan Raju K., The Research Importance and Possible Problem Domains for NoSQL Databases in Big Data Analysis. In the Proceedings of the 2nd International Conference on Computational and Bio Engineering. Organized Sri Padmavati Mahila Visvavidyalayam (Women's University), Tirupati, Andhra Pradesh, India, during 4–5 December 2020. Springer Lecture Notes in Networks and Systems, Vol. 215, pp 433-439, September 2021. ISBN: 978-981-16-1941-0 https://doi.org/10.1007/978-981-16-1941-0_43 (Scopus)
- Tiwari, L., Awasthi, V., Patra, R.K., Miri, R., Raja, H., Bhaskar, N. (2022). Lung Cancer Detection Using Deep Convolutional Neural Networks. In the Proceedings of the 5th INTERNATIONAL CONFERENCE ON INTELLIGENT COMPUTING AND COMMUNICATION (ICICC-2021), Springer Lecture Notes in Networks and Systems, vol 446, pp. 373–385, held at Dayananda Sagar University, Bengaluru, India during 26th & 27th NOVEMBER, 2021. ISBN: 978-981-19-1559-8. (Scopus)
- Landge, P.B., Bhise, D.V., Nagwanshi, K.K., Patra, R.K., Durugkar,, S.R. A Selection-Based Framework for Building and Validating Regression Model for COVID-19 Information Management. In the Proceedings of the 5th International Conference on Smart Computing and Informatics (SCI 2021), Springer Smart Innovation, Systems and Technologies, vol 282, pp. 611-622., held at Vasvi College of Engineering, Hyderabad, Telangana, India, during 17 18 September 2021. ISBN: 978-981-16-9669-5. (Scopus)
- Gupta, A., Mahule, R., Patra, R.K., Saraswat, K.G., Akhtar, M., Fingerprint Liveliness Detection to Mitigate Spoofing Attacks Using Generative Networks in Biometric System. In the Proceedings of the 5th International Conference on Smart Computing and Informatics (SCI 2021), Springer Smart Innovation, Systems and Technologies, vol 282, pp. 623-631., held at Vasvi College of Engineering, Hyderabad, Telangana, India, during 17 18 September 2021. ISBN: 978-981-16-9669-5. (Scopus)
- Mahender, U., Madhu, T., Raj Kumar Patra, (2023). A Machine Learning and Fuzzy Heterogeneous Data Sources for Traffic Flow Prediction System. In the Proceedings of the 5th International Conference on Communications and Cyber Physical Engineering (ICCCE 2022), Springer Advances in Cognitive Science and Communications Singapore, Vol. 37, pp. 795-803. ISBN: 978-981-19-8086-2, https://doi.org/10.1007/978-981-19-8086-2_76 (Scopus)
- Raj Kumar Patra, Bassamma Patil, T. Sathish Kumar, Gandla Shivakanth, Manjula B M, Machine Learning Based Sentiment Analysis and Swarm Intelligence. In the proceedings of the IEEE International Conference on Integrated Circuits and Communication Systems (ICICACS) held at S. L. N. College of Engineering Raichur, India, April 2023, pp. 1-8, DOI: 10.1109/ICICACS57338.2023.10100262. (Scopus and WoS)
- M. Vinodh Kumar, Raj Kumar Patra, Veena K, A Siva Kumar Reddy, V Sunil Kumar, An Involuntary Liver Cancer Recognition in Abdominal Liver Imageries with Soft Optimization Methods in Biomedical Application. In the proceedings of the IEEE International Conference on Integrated Circuits and Communication Systems (ICICACS) held at S. L. N. College of Engineering Raichur, India, April 2023, pp. 1- 6, DOI: 10.1109/ICICACS57338.2023.10099601. (Scopus and WoS)
- G. R. Kumar, Y. M. M. John, R. K. Patra, A. H. A. Hussein and M. I. Habelalmateen, "An Efficient QoS Aware Hybrid Localization Model Using

- Pelican Optimization Algorithm for Cognitive Wireless Sensor Networks," In the proceedings of the IEEE International Conference on Ambient Intelligence, Knowledge Informatics and Industrial Electronics (AIKIIE), Held at Rao Bahadhur Y. Mahabaleswarappa Engineering College, Ballari, India, 02-03 November 2023, published online on 22nd January 2024 pp. 1-5, doi: 10.1109/AIKIIE60097.2023.10390214. (Scopus and WoS)
- 25 Naga Raju M, Raj Kumar Patra, D Nagesh, Madhusudan Kulkarni, R. Meena Devi, "A New Optimization Approach Based on Firefly and Cuckoo Search Algorithm for Dynamic Multi-Objective Optimization Problem in Workflow Scheduling," In the proceedings of the IEEE International Conference on Evolutionary Algorithms and Soft Computing Techniques (EASCT), Held at RV Institute of Technology and Management, Bengaluru, India, 20-21 October 2023, published online on 22nd January 2024, pp. 1-5, doi: 10.1109/EASCT59475.2023.10392698. (Scopus and WoS)
- M. M. Adnan, A. C. Ramachandra, Raj Kumar Patra, S. Jagadish and A. H. A. Hussein, "Deep Learning based Arrhythmia Classification using Orthogonal Wavelet Filtering with Moth Flame Optimization Algorithm," In the proceedings of the IEEE International Conference on Integrated Intelligence and Communication Systems (ICIICS), Held at Sharnbasva University, Kalaburagi, India, 2023, published online on 8th February 2024, pp. 1-5, doi: 10.1109/ICIICS59993.2023.10421630. (Scopus and WoS)
- B. Kishor, R. Tiwari, R. K. Patra, L. Pinjakar and M. Singh, "An Intelligent Forecasting Classification Model for Traffic Analysis using Machine Learning Techniques," In the proceedings of the IEEE Fourth International Conference on Advances in Electrical, Computing, Communication and Sustainable Technologies (ICAECT), held at Shri Shankaracharya Technical Campus, Bhilai, India, March 2024, pp. 1-4, doi: 10.1109/ICAECT60202.2024.10469377. (Scopus and WoS)
- M. B. Neelagar, T. C. Manjunath, R. K. Patra, S. Jagadish and D. Mazumder, "Convolutional Neural Network Based Glaucoma Detection and Classification using Optic Disc Localization," In the proceedings of the IEEE 2nd International Conference on Integrated Circuits and Communication Systems (ICICACS-2024), held at SLN College of Engineering, Raichur, India, April 2024, pp. 1-5, doi: 10.1109/ICICACS60521.2024.10498855. (Scopus and WoS)
- Parameswar, M., Venkataiah, V., Patra, R.K., Mounika, V., Kumar, S., Prasanthi, B., "Multi-agent and Artificial Neural Network for Traffic Lighting Optimization", In the proceedings of Sixth International Conference on Smart Computing and Informatics (SCI 2024), Springer Lecture Notes in Networks and Systems, vol. 1147, pp. 435-445, ANITS, Sangivalasa Visakhapatnam, Andhra Pradesh, India, during 18-19 April 2024, ISBN: 978-981-97-7880-5, https://doi.org/10.1007/978-981-97-7880-5 37 (Scopus)
- Archana, K., Kamala, M., Narayana, V.A., Reddy, G., Patra, R.K., Menaka, G. (2025). "Analysis on Classical Image Forgery Identification Approach with Higher Accuracy Using Fusion-Based Testing Methodology", In the proceedings of Cybernetics, Human Cognition, and Machine Learning in Communicative Applications. Cognitive Science and Technology. Springer. https://doi.org/10.1007/978-981-97-8533-9 20 (Scopus)
- Vishnu Kumar Mishra, Megha Mishra, Rajesh Tiwari, T Ram Kumar, Tarun Dhar Diwan, Raj Kumar Patra, "Vehicle Detection and Speed Estimation Using Deep Learning," 2024 IEEE 6th International Conference on Cybernetics, Cognition

- and Machine Learning Applications (ICCCMLA), Hamburg, Germany, 2024, pp. 282-286, doi: 10.1109/ICCCMLA63077.2024.10871254. (**Scopus and WoS**)
- Vishnu Kumar Mishra, Megha Mishra, Rajesh Tiwari, Tarun Dhar Diwan, Rama Soni, Raj Kumar Patra, "Deep Learning Algorithms for Pneumonia: A Comparative Approach to Classification and Segmentation," 2024 IEEE 6th International Conference on Cybernetics, Cognition and Machine Learning Applications (ICCCMLA), Hamburg, Germany, 2024, pp. 249-255, doi:10.1109/ICCCMLA63077.2024.10871899 (Scopus and WoS)
- Patra, R.K., Menaka P, G., Shiny, X.S.A., Priyanka, S., Parashar, K., Bhaskar, T. (2025). "An Analytical Study on DC Adjustments and Homomorphic Filtering for Brightness-Preserving Contrast Enhancement of Medical Images." In proceedings of the 15th International Conference on Soft Computing and Pattern Recognition (SoCPaR 2023), Springer Lecture Notes in Networks and Systems, vol. 1243, pp 454-461. https://doi.org/10.1007/978-3-031-81080-0_42 (Scopus)
- Rasheeduddin, S., Sravani Kumari, V., Chandra Sekhar Reddy, L., Parameswar, M., Kotha, M., Patra, R.K. (2025). "Evaluation of the MGPSO's Optimal Resource Distribution for Achieving Cost Effective Cloud Computing with Genetic Algorithm Particle Swarm Optimization (GA PSO)". In Proceedings of the 15th International Conference on Soft Computing and Pattern Recognition (SoCPaR 2023)., Lecture Notes in Networks and Systems, vol. 1247, pp 467–474, Springer, Cham. https://doi.org/10.1007/978-3-031-81086-2_52 (Scopus)

Book Chapters

Sl. No. Details of Published Articles

- Tilendra Shishir Sinha, Devanshu Chakraverty, **Raj kumar Patra** and Rohit Raja, Modelling and Simulation for the Recognition of Physiological and Behavioural Traits Through Human Gait and Face Images, Discrete Wavelet Transforms- A Compendium of New Approaches and Resents Application, by Intech China, ISBN 978-953-51-0940-2, pp. 95-125, Feb 2013, edited by Dr. Awad Kh. Al. Asmari http://dx.doi.org/10.5772/52565.
- 2 Tilendra Shishir Sinha, Raj Kumar Patra, Rohit Raja and Ravi Prakash Dubey, Progressive-Regressive Strategy for Biometrical Authentication, Wavelet

- Transform and Some of Its Real-World Applications, by Intech Europe, ISBN 978-953-51-2230-2, pp. 1-33, Dec. 2015 edited by Dr. Dumitru Baleanu. DOI: 10.5772/61786.
- Rohit Raja, Hiral Raja, Raj Kumar Patra, Kamal Mehta, Akansha Gupta, K Ramya Laxmi, Assessment methods of Cognitive ability of human brains for inborn intelligence potential using pattern Recognition, in Biometric Systems, by IntechOpen UK, 10th February 2021, pp. 1-11, Edited by Muhammad Sarfraz, ISBN: 978-1-78984-188-6, DOI: 10.5772/intechopen.93268.
- Raj Kumar Patra, Akansha Gupta, Sudeep Joel, Swati Jain, Parkinson's disease Detection using voice measurements, in Artificial Intelligence and Machine Learning in 2D/3D Medical Image Processing, by CRC Press. ISBN: 9780429354526, pp. 143-158, December 2020 Edited by Rohit Raja, Sandeep Kumar, Shilpa Rani, K. Ramya Laxmi. ISBN: 9780429354526. https://doi.org/10.1201/9780429354526
- Raj Kumar Patra, A. Mahender, G Madhukar, Inductive Learning Including Decision Tree and Rule Induction Learning, in Data Mining and Machine learning Applications, Editors Rohit Raja, Kapil Kumar Nagwanshi, Sandeep Kumar and K. Ramya Laxmi, by Scrivener Publishing, December 2021. ISBN: 9781119791782. https://doi.org/10.1002/9781119792529.ch9 (Scopus)
- Raj Kumar Patra, Srinivas Konda, M Varaprasad Rao, Kavitarani Balmuri, G Madhukar, Predictive Model and Theory of Interaction, in the edited book Cognitive Behaviour and Human ComputerInteraction Based on Machine Learning Algorithms, Editors Sandeep Kumar, Rohit Raja, Shrikant Tiwari and Shilpa Rani by Scrivener Publishing, pp. 179-209, November 2021. ISBN: 9781119791607, https://doi.org/10.1002/9781119792109.ch9 (Scopus)
- Raj Kumar Patra, M Varaprasad Rao, Kavitarani Balmuri, Srinivas Konda, Manoj Kumar Chande, High Performance Computing and Fault Tolerance Technique Implementation in Cloud Computing, in the edited book Green Computing and its Applications, Editors Sanjay Kumar, Rohit Raja, Alok Kumar Singh Kushwaha, Raj Kumar Patra, Saurabh Kumar, by Nova Science Publishers, pp. 255-310, December 2021. ISBN: 978-1-68507-357-2 (Scopus)