Achievements 2021

Distinguish Members

Member of BIS -Bureau of Indian Standard

LITD 17 Panel 6 : Information System Security and Privacy

LITD 19 Panel 2: e-Learning "User Interface"

LITD 36: Computer Hardware, peripherals equipment and User Interface

Member of ISO - International Organization for Standardization

ISO/IEC JTC 1/SC 36WG8: Learning Analytics Interoperability

Patent

Patent Title: Enhancing Cyber Security using Hybrid Authentication Technique, Gaurav Gambhir, M Gambhir, J K Mandal, Patent Number 2021100948, Innovation Patent, Australian Government, Eight years from 19.02.2021.

Ph. D. Awarded

Nil

Books

Nil

Book Chapters

1. Das, S., Mandal, J.K. (2021). Color Image Compressed Sensing Using Modified Stagewise Orthogonal Matching Pursuit. In: Dutta, P., Mandal, J.K., Mukhopadhyay, S. (eds) Computational Intelligence in Communications and Business Analytics. CICBA 2021. Communications in Computer and Information Science, vol 1406. Springer, Cham. https://doi.org/10.1007/978-3-030-75529-4_2
2. Krishan Kundu, Prasun Halder, Jyotsna Kumar Mandal, "Urban Growth Prediction of Kolkata City Using SLEUTH Model", Proceedings of International Conference on Innovations in Software Architecture and Computational Systems. Studies in Autonomic, Data-driven and Industrial Computing. Springer, Singapore, (2021). https://doi.org/10.1007/978-981-16-4301-9_11
3. Bandyopadhyay S., Thakur S.S., Mandal J.K. (2021), Implementation of Real-Time Virtual Dressing Room Using Microsoft Kinect SDK and Supervised Learning. In: Bhattacharjee D., Kole D.K., Dey N., Basu S., Plewczynski D. (eds) Proceedings of International Conference on Frontiers in Computing and Systems. Advances in Intelligent Systems and Computing, vol 1255. Springer, Singapore. https://doi.org/10.1007/978-981-15-7834-2_2

Edited Volumes as Volume Editor/Corresponding Editor /Conference Organization

1. The edited volume "Topical Drifts in Intelligent Computing" -Proceedings of International Conference on Computational Techniques and Applications (ICCTA 2021) published by Springer Nature 28.04.2022. The Link: https://link.springer.com/book/10.1007/978-981-19-0745-6
2. Advanced Techniques for IoT Applications, Proceedings of EAIT 2020, Editors: Mandal, Jyotsna Kumar, De, Debashis (Eds.), Lecture Notes in Networks and Systems (https://www.springer.com/gp/book/9789811644344), Springer Nature. 2021.
3. Proceedings of International Conference on Computational Intelligence and Computing, ICCIC 2020, Editors: Mandal, Jyotsna Kumar, Roy, Joyanta Kumar (Eds.), Algorithms for Intelligent Systems (https://www.springer.com/gp/book/9789811633676), Springer Nature. 2021.
4. Proceeding of Fifth International Conference on Microelectronics, Computing and Communication Systems, MCCS 2020,Editors: Nath, Vijay, Mandal, J.K. (Eds.), Lecture Notes in Electrical Engineering (https://www.springer.com/gp/book/9789811602740), Springer Nature. 2021.
5. Advances in Medical Physics and Healthcare Engineering Proceedings of AMPHE 2020, Editors: Mukherjee, M., Mandal, J.K., Bhattacharyya, S., Huck, C., Biswas, S. (Eds.), Lecture Notes in Bioengineering (https://www.springer.com/gp/book/9789813369146), Springer Nature. 2021.
6. Computational Intelligence in Communications and Business Analytics,Third International Conference, CICBA 2021, Santiniketan, India, January 7–8, 2021, Revised Selected Papers, Editors: Dutta, Paramartha, Mandal, Jyotsna K., Mukhopadhyay, Somnath (Eds.), Communications in Computer and Information Science(https://www.springer.com/gp/book/9783030755287), Springer Nature. 2021.

SCI Journals

1. Santra, D., Basu, S. K., Mandal, J. K., & Goswami, S. (2019). Rough set based lattice structure for knowledge representation in medical expert systems: low back pain management case study. Expert Systems with Applications, Elsevier (Impact factor: 6.954 (2019)) [SCI], 145,113084

2. Kundu, K, Halder P and Mandal, J K, Change Detection and Patch Analysis of Sundarban Forest During 1975–2018 Using Remote Sensing and GIS Data, SN Computer Science , Springer(June 2021), 2:364.

3. Debarpita Santra, Subrata Goswami, Jyotsna Kumar Mandal and Swapan Kumar Basu, Low Back Pain Expert Systems: Clinical Resolution through Probabilistic Considerations and Poset", Journal Artificial Intelligence in Medicine, Science Direct Elsevier,Volume   120,October   2021,   102163(SCI,   IF:5.326)   (https://www.sciencedirect.com/science/article/pii/S0933365721001561), September, 2021.

4. Krishan Kundu, Prasun Halder & Jyotsna Kumar Mandal, Detection and Prediction of Sundarban Reserve Forest using the CA-Markov Chain Model and Remote Sensing Data", Earth Science Informatics (2021), Springer Nature(17th July 2021(SCIE with IF: 2.878))2021, DOI: https://doi.org/10.1007/s12145-021-00648-9, 2021.

5. *M Marjit Sing, Mandal, J K, A Novel Wide & Deep Transfer Learning Stacked GRU Framework for Network Intrusion Detection*, Journal of Information Security Applications, ELSEVIER, Vol 91,SCIE(IF 3.872), June, 2021, https://doi.org/10.1016/j.jisa.2021.102899, https://www.sciencedirect.com/science/article/pii/S2214212621001265.

6. *Sounak Sadhukhan, P.K. Mishra, S.K. Basu, J.K. Mandal, A multi-scale agent-based model for avascular tumour growth, Biosystems,Volume 206,2021, 104450,ISSN 0303-2647,https://doi.org/10.1016/j.biosystems.2021.104450. ELSEVIER SCI, SCIE with IF:1.808. (https://www.sciencedirect.com/science/article/pii/S0303264721001040).*

7. *Arindam Sarkar, Moirangthem Marjit Singh, Jyotsna Kumar Mandal, Neural Synchronization guided Concatenation* of Header and Secret Shares for Secure transmission of Patients' Electronic Medical Record: Enhancing Telehealth Security for COVID-19, Arabian Journal for Science and Engineering(SCIE, IF 2.334, Springer Nature, January 2021.

8. Gambhir, G and Mandal, J K, Shared memory implementation and performance analysis of LSB steganography based on chaotic tent map, Innovations in Systems and Software Engineering, https://doi.org/10.1007/s11334-021-00385-8(March 2021)

9. Bandyopadhyay, S., Thakur, S.S. & Mandal, J.K. Product recommendation for e-commerce business by applying principal component analysis (PCA) and K-means clustering: benefit for the society. Innovations Syst Softw Eng 17, 45–52 (2021). https://doi.org/10.1007/s11334-020-00372-5

Invited Talks/Expert Lecture and Conference attended
No. of Expert/Invited Lecture delivered: 20
Conference attended: 20

Expert Lecture:

More than 20 talks delivered online during the year. Out of which five AICTE Sponsored FDP. Participated in NAAC Peer tem training programme, One academic audit for the, Vidyasgar University. Two Expert Lecture in the UGC sponsored Refresher courses.