

Achievements 2020

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

Ph. D. Awarded

1. Amit Kumar Gupta, Central School, Silchar, “Efficient and secure routing in a DTN for a post disaster scenario”, (30th June 2016), submitted 12th March, 2019, awarded 27th November, 2020

Books

1. Title: Reversible Steganography and Authentication via Transform Encoding from Springer (<https://link.springer.com/book/10.1007/978-981-15-4397-5>), June 2020, Author J K Mandal, published by Springer Nature

Book Chapters

1. Rajeev Chatterjee, Ranjan Dasgupta, Jyotsna Kumar Mandal(2020), Multi-Controllers Based Subnet in SDN with BRS, ICT for Competitive Strategies, Taylor & Francis Group, CRC Press.
2. Krishan Kundu, Prasun Halder, Jyotsna Kumar Mandal, “Forest Cover Change Analysis in Sundarban Delta Using Remote Sensing Data and GIS”. Intelligent Computing Paradigm: Recent Trends. Studies in Computational Intelligence, Vol. - 784. pp. -85-101, Springer, Singapore. (2020). https://doi.org/10.1007/978-981-13-7334-3_7
Indexed in: SCOPUS, SCImago, Web of Science, DBLP, WTI Frankfurt eG, zbMATH
3. Debarpita Santra, J. K. Mandal, S. K. Basu and Subrata Goswami Design Considerations of a Medical,Expert System for Differential Diagnosis of Low Back Pain (ESLBP), Proceedings of the Global AI Congress 2019, Advances in Intelligent Systems and Computing 1112, https://doi.org/10.1007/978-981-15-2188-1_34
4. Krishan Kundu, Prasun Halder, Jyotsna Kumar Mandal, “Estimation of Sundarban Reserve Forest Using Self-organizing Maps and Remote Sensing Data”, Proceedings of International Conference on Computational Intelligence and Computing. Algorithms for Intelligent Systems. Springer, Singapore, (2022). https://doi.org/10.1007/978-981-16-3368-3_20.
5. Hassan, K L, Mandal, J K, Mondal, S,, “A dynamic threshold-based trust-oriented intrusion detection system in MANET”, Proceedings of International Conference on Computational Intelligence and Computing. Algorithms for Intelligent Systems. Springer, Singapore, (2022). https://doi.org/10.1007/978-981-15-21888-1_55
6. Bandyopadhyay S., Thakur S.S., Mandal J.K. (2020) Mining User’s Data Based on Customer’s Rating for Prediction and Recommendation—A Comparative Analysis. In: Mandal J., Bhattacharya K., Majumdar I., Mandal S. (eds) Information, Photonics and Communication. Lecture Notes in Networks and Systems, vol 79. Springer, Singapore. https://doi.org/10.1007/978-981-32-9453-0_12

Edited Volumes as Volume Editor/Corresponding Editor /Conference Organization

1. Advances in Smart Communication Technology and Information Processing, OPTRONIX 2020, Editors: Banerjee, Soumen, Mandal, Jyotsna Kumar (Eds.), Lecture Notes in Networks and Systems (<https://www.springer.com/gp/book/9789811594328>), Springer Nature. 2020.
2. Intelligent Computing: Image Processing Based Applications, Editors: Mandal, J. K., Banerjee, Soumen (Eds.), Advances in Intelligent Systems and Computing(<https://www.springer.com/gp/book/9789811542879>), Springer Nature. 2020
3. Advanced Techniques for IoT Applications, Proceedings of EAIT 2020, Editors: Mandal, Jyotsna Kumar, De, Debashis (Eds.), ISBN 978-981-16-4435-1, © 2022, Softcover, eBook,2021.
4. Proceedings of International Conference on Computational Intelligence and Computing has been published by the Springer Nature. The 1st international Conference on Computational Intelligence & Computing (ICCIC-2020) was held at SR Group of Institutions, Jhansi (U.P) during February 19-20, 2021 Organized by the Electro-Inventor, Hindmotor (Hooghly) and Eureka Sciencetech Research Foundation (ESRF), Kolkata in collaboration with SR Group of Institutions (SRGI). Jhansi and The

Institution of Electronics & Telecommunication Engineers (IETE), Kolkata Centre. The link:
<https://link.springer.com/book/10.1007/978-981-16-3368-3>.

SCI Journals

1. Santra, D., Mandal, J. K., Basu, S.K. et al. Medical expert system for low back pain management: design issues and conflict resolution with Bayesian network. *Med Biol Eng Comput* (2020). <https://doi.org/10.1007/s11517-020-02222-9>, Springer(SCI, IF-2.6022), 7 September,2020.
2. Soma Bandyopadhyay, S. S. Thakur1, J. K. Mandal, Product recommendation for e-commerce business by applying principal component analysis (PCA) and K-means clustering: benefit for the society, *Innovations in Software and Systems Engineering(NASA Jpurnal)*, Spinger, SCIMago, June, 2020
3. Mandal, J K., Chakraborty, R, A 10nm MOS and Its Applications, *Microsystem technologies*, Springer (Microsyst Technol (Feb, 19,2020) (IF:1.581).
4. Kundu, K, Mandal, J K., Halder, P, Urban Change Detection Analysis during 1978-2017 in Kolkata, India using Multi-temporal Satellite Data, *Journal of the Indian Society of Remote Sensing* (Sept., 2020) (SCIE, IF: 1.563)
5. Das, S, Mandal, J K., An enhanced block based Compress Sensing Technique using orthogonal matching pursuit, *Signal, Image and Video Processing*, Springer (2020) (in press)(SCI, IF 2.157).
6. Gambhir, G. & Mandal, J.K. Multicore implementation and performance analysis of a chaos based LSB steganography technique, *Microsystem technologies*, Springer (Microsyst Technol (2020) 25: 1669. <https://doi.org/10.1007/s00542-020-04762-4>) Feb. 2020 (IF:2.276).
7. Das, S., Mandal, J.K. Saliency detection via outlier pursuit in compress domain (SDOPCD). *Microsyst Technol* (2020). <https://doi.org/10.1007/s00542-020-04769-x>
8. Santra, D., Mandal, J. K., Basu, S. K., & Goswami, S. (2019). Addressing Design Issues in Medical Expert System for Low Back Pain Management: Knowledge Representation, Inference Mechanism, and Conflict Resolution Using Bayesian Network. *Medical & Biological Engineering & Computing*, Springer (Impact factor: 2.039 (2019) [SCI]) [In revision]**Invited Talks/Expert Lecture and Conference attended**
No. of Expert/Invited Lecture delivered: 13
Conference attended: 10

Expert Lecture:

More than 30 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.