

DETAILS OF CONFERENCE PAPERS PUBLISHED DURING THE ACADEMIC YEAR 2021-22

APPLIED ELECTRONICS & INSTRUMENTATION ENGINEERING

1. **M. Das**, R. Mandal., Design of a PV-Battery-Supercapacitor water pumping system based on the varying operating factor of the PV module, International conference on Emerging Electronics and Automation (E2A), NIT Silchar, Dec 17-19, (2021)
2. **M. Das** , S. Mukherjee , R. Mandal, **A. Halder**, Analysis of a standalone Photovoltaic-Wind-Battery hybrid renewable energy system for an Engineering Department and charge electric vehicles from excess generated electricity, International conference on Power Electronics & Sustainable Development (ICPESD), NIT Jamshedpur, Apr23-24, 2022.
3. **R.Mandal, U.Maji**, S. Pal, "Human Activity Recognition: A Step towards Ambient Assisted Living", International Conference on Emerging Electronics & Automation (E2A), NIT Silchar, Dec 17-19, (2021).

BIOTECHNOLOGY

4. D. Chatterjee, S. Das, A. Haldar, A. Haldar, **S. Chatterjee**. "Current Rapid Diagnostics Tools of COVID-19 Disease Management: A Systematic Review", International Conference on "Rethinking Business Strategies by Reshaping Business Perspectives in the Current Business Environment" 13-14 May (2022).

COMPUTER SCIENCE & ENGINEERING

5. **A. Chakraborty** and **S. Joardar**, "Intrusion Detection System Performance Comparison using Dimensionality Reduction Techniques", International Conference on IoT and its Applications (ICIA- 2020) during 26th - 27th December 2020, organized by National Institute of Technology, Jamshedpur. Proceeding has been published by Springer, "Internet of Things and Its Applications" Part of the Lecture Notes in Electrical Engineering book series (LNEE, volume 825) , pp 395-406, published in 2022.
6. **S. Kuila**, N. Dhandra and **S. Joardar**, "Feature Extraction and Classification of ECG signals through Dimension Reduction". International Conference on IoT and its Applications (ICIA- 2020) during 26th - 27th December 2020, organized by National Institute of Technology, Jamshedpur. Proceeding has been published by Springer, "Internet of Things and Its Applications" Part of the Lecture Notes in Electrical Engineering book series (LNEE, volume 825) , pp 223-233, published in 2022.
7. **S. Koley**, K. K. Mandal, "Security Issues in IaaS Components on Cloud Computing". In Emerging Technologies in Seventeenth International Conference for History and Heritage 2022, Dhaka University, Dhaka, Bangladesh, May, 2022.
8. K. K. Mandal, **S. Koley**, "Steganography - The Art of Sending Message Using Number System". In Seventeenth International Conference for History and Heritage 2022, Dhaka University, Dhaka, Bangladesh, May, 2022
9. P.P. Acharjya,,**S.Koley**, S. Chattopadhyay, "A Smart Emergency Exit System Based on IoT for Fire Perils". In Second International Conference on Advanced Computing and Applications (ICACA-2021), Organized by CSI Kolkata Chapter. https://doi.org/10.1007/978-981-16-5207-3_13.
10. **A. Mazumdar**, B. Chatterjee, M. Banerjee, I. H. Bhati "Assistive Technology for Pedagogical Support and Application of Data Analysis in Neuro developmental Disability" presented in IEMIS 2022: 3rd International Conference on Emerging Technologies in Data Mining and Information Security held during 23-25 Feb 2022, Kolkata, India.[SCOPUS INDEXED]

11. G. Prasad, **A. Chakraborty**, A. Banerjee, "Malaria Detection using VGG19 and Deep Convolutional Neural Network", (pp. 283-292), Springer Publications, 2022.
12. **S. Jana**, M. Mallik, A. K. Maji, R. K. Pal. "A novel search tree based 3D Sudoku solver." International Conference on Computing and Communication System (I3CS-2020), Lecture Notes in Network and Systems 170, pp. 709–717, Springer Nature Singapore Pte Ltd., 2021.
13. **S. Jana**, A. Dey, A. K. Maji, R. K. Pal. "Solving Sudoku using neighbourhood based mutation approach of genetic algorithm." Advanced Computing and Systems for Security (ACSS-2021), vol. 13, Springer Nature.
14. **S. Jana**, N. Dutta, A. K. Maji, R. K. Pal. "A novel time-stamp based audio encryption scheme using Sudoku puzzle." 2nd International Conference on Frontiers in Computing and Systems (COMSYS-2021), Sep. 29 – Oct. 1 2021.
15. **S. Pramanik**, M. G. Galety, D.Samanta, N. P Joseph, "Data Mining Approaches for Decision Support Systems", 3rd International Conference on Emerging Technologies in Data Mining and Information Security, 2022.
16. **S. Pramanik**, D.Pandey, S.Joardar, Niranjnamurthy M, B. K. Pandey and J.Kaur, "An Overview of IoT Privacy and Security in Smart Cities", ICCAPE, 2022.
17. **S. Pramanik**,Niranjnamurthy M. and S. N. Panda, "Using Green Energy Prediction in Data Centers for Scheduling Service Jobs", ICRICTSA 2022, Bengaluru, 2022.
18. **S. Saha**, A. Chattopadhyay, S. K. Mal, and A. Nag,"A secure 'e-Tendering' application based onSecret Image Sharing", in International Conference on Network Security and Blockchain Technology (ICNSBT 2021), pp. 64-77, LNNS, volume 481, Springer.
19. S. Panja, N. Patowary, **S. Saha**, and A. Nag, "Anomaly detection in IoT using Extended Isolation Forest", published in International Symposium on Artificial Intelligence (ISAI 2022), held in February 17 - 19, 2022.
20. **J. Majumder**, C. Pradhan, "CAPTCHA Based Image Steganography to Achieve User Authentication", In the Karkonosze University of Applied Sciences, Jelenia Gora, Poland, Europe 25th - 26th June, 2022

COMPUTER SCIENCE & ENGINEERING (ARTIFICIAL INTELLIGENT & MACHINE LEARNING)

21. S. Bandyopadhyay, A Sarkar, **B Jana**, **A Paria**, Deep Learning approaches for analysis and detection of Tomato leaf diseases, International Symposium on Artificial Intelligence – 2022, (In Press)
22. **A. Paria**, Prediction of Crop Production Using Random Forest Regression , International Conference on Computational Intelligence, Data Science and Cloud Computing- 2021, (In Press)
23. **T.K.Ghosh**, Hybridization of Sine-Cosine Algorithm with K-Means for Pathology Image Clustering, International Symposium on Artificial Intelligence - 2022, (In Press)

COMPUTER SCIENCE & ENGINEERING (CYBER SECURITY)

24. **S.Saif**, P.Das, S.Biswas, LSEA-IOMT: On the implementation of Lightweight Symmetric Encryption Algorithm for Internet of Medical things (IoMT), 7th International Conference on Emerging Applications of Information Technology (EAIT 2022), March 29-31, 2022 (Accepted)
25. K.Karmakar, **S.Saif**, S.Biswas, S.Neogy, An intelligent vehicular communication based framework to provide seamless connectivity in WBAN, Fifth International Conference in Communication, Devices and Networking (ICCDN 2021), December 15-16, 2021 (Accepted)
26. K.Karmakar, **S.Saif**, S.Biswas, S.Neogy, Application of Relay Nodes in WBAN-Based Smart Healthcare for Energy Conservation Explained with Case Studies. In: High Performance Computing and Networking. Lecture Notes in Electrical Engineering, vol 853. Springer, Singapore,2022.
27. K.Karmakar, **S.Saif**, S.Biswas, S.Neogy, A Priority Based Routing Protocol to Improve Quality of Service (QoS) in Wireless Body Area Network for COVID and Diabetic Patients. In: Proceedings of the 3rd International Conference on Communication, Devices and Computing. Lecture Notes in Electrical Engineering, vol 851. Springer, Singapore,2022

28. T.Pal, S.Barari, R.Saha, **S.Saif** and S.Biswas, Design and Implementation of Centrality Approach-Based Energy Efficient Routing in Wireless Sensor Network. In: Proceedings of International Conference on Advanced Computing Applications. Advances in Intelligent Systems and Computing, vol 1406. Springer, Singapore,2022
29. D. Dey, S. Pattanayak and **S. Samanta**, Chaotic Based Image Steganography Using Polygonal Method,International Conference on Nonlinear Dynamics and Applications (ICNDA 202), Accepted(Springer Proceedings in Complexity, Scopus Indexed)
30. **S. Samanta**, A Visible Watermarking approach likely to Steganography using Nonlinear Approach, International Conference on Nonlinear Dynamics and Applications (ICNDA 202), Accepted(Springer Proceedings in Complexity, Scopus Indexed)

ELECTRONICS & COMMUNICATION ENGINEERING

31. **R. K. Maity**, **J. Samanta**, and J. Bhaumik, “An Improved SEC-DED-DAEC Code for SRAMs”, 4thInternational Conference on ‘Energy Systems, Drives and Automations’, ESDA2021, Dec-2021. pp. xxx.
32. **A. Bhattacharyya**, S. Paul, P. Debnath, D. De, and M. Chanda, “Performance Assessment of Electrostatically Doped Dual Pocket Vertical Tunnel Field Effect Transistor,” 2nd International Conference on Micro/Nanoelectronics Devices, Circuits and Systems (MNDCS-2022), Jan. 29-31, 2022, NIT Silchar, Assam, India. (Virtual Mode)
33. **A. Bhattacharyya**, M. Banerjee, P. Debnath, D. De and M. Chanda, “RF/Analog Performance Analysis of Electrostatically Doped Dual Pocket Vertical Tunnel Field Effect Transistor,”IEEE VLSI DCS-2020: 3rd IEEE Conference on VLSI Device, Circuit and System, Feb. 26-27, 2022, IEEE Electron Device MSIT Student Branch Chapter, MeghnadSaha Institute of Technology, Kolkata, WB, India.

INFORMATION TECHNOLOGY

34. **B. Das**, A.A Sekh, M. Majumder and S. Phadikar, “ABID: Attention-based Bengali Image Description”, in proceedings of International Conference on Communication, Devices and Computing (ICCDC 2021), (pp. 305-314). Springer, Singapore, 2021
35. **T.Khan** and A.F. Mollah, A Novel Stroke Measurement Operator for Visual Objects. In Internet of Things and Its Applications (pp. 271-281). Springer, Singapore, 2022
36. **B. Ghose** and Z. Rehena, “Fog abetted Early Alert System for Monitoring Air Pollution in Smart Cities” in proceedings of the International Conference on IoT and Blockchain Technology (ICIBT) (pp. 1-6). IEEE.
37. **M. Bhattacharyya**, “Analysing the RAIN Technology: Asurvey”, in proceedings of the APPSCICON 2022(National Conference), (in press), 2022
38. N. Anwar, **T. Khan** and A.F. Mollah “Text Detection from Scene and Born Images: How Good is Tesseract?. In Recent Trends in Communication and Intelligent Systems (pp. 115-122). Springer, Singapore, 2022.

ELECTRICAL ENGINEERING

39. **N. Manna** and A. K. Sil, "An Optimization Based Approach for Peak Shaving and Phase Balancing of Unbalanced Radial Distribution System by Peak Load Clustering," 2022 Second International Conference on Power, Control and Computing Technologies (ICPC2T), 2022, pp. 1-6, doi: 10.1109/ICPC2T53885.2022.9776741.
40. **A. Barman**, **S.Dutta**, K. Tiwari, S.Roy, **S.Pain**, “Genetic Algorithm Based Adaptive PID Tuning of Time Delay Process”,organized by department of Computer Science and Engineering,HIT in association with Computer Society of India, Kolkata Chapter,February,2022.

41. T. Roy, K. Tiwari, S. Choudhury and **S. Pain**, "Experimental Study on Viscosity of Soybean Oil and its dependence on temperature", BCREC Engineering & Science Transaction(BEST), Volume 3, Issue 01, pp. 126-134, 2022.

MECHANICAL ENGINEERING

42. **G.K. Bose** and **P.Pain**, "Metaheuristic optimization while machining Ti-6 Al-4 V by using Yb-YAG Laser", at the 5th International Conference on Mathematical Techniques in Engineering Applications (ICTEA-2021) Organized by Department of Mathematics, Graphic Era Deemed To be University, UK, from 03-12-2021 to 04-12-2021.
43. **G.K. Bose**, S. Digar., S. Pal, S. Bera, S. Bhunia, "Optimizing the effects of control parameters of EDM process while machining D2 tool steel" at the 5th International Conference on Mathematical Techniques in Engineering Applications (ICTEA-2021) Organized by Department of Mathematics, Graphic Era Deemed To be University, UK, from 03-12-2021 to 04-12-2021.
44. **B. Bairagi**, **B. Dey**, **G.K. Bose**, "A new decision making frame work for performance evaluation and selection of industrial robots considering tangible and intangible factors" at the 5th International Conference on Mathematical Techniques in Engineering Applications (ICTEA-2021) Organized by Department of Mathematics, Graphic Era Deemed To be University, UK, from 03-12-2021 to 04-12-2021.
45. **B. Bairagi**, **B. Dey**, **G.K. Bose**, "A fuzzy multi criteria homogeneous group discussion making approach for performance evaluation and selection of suppliers in supply chain management: A comparative study" at the 5th International Conference on Mathematical Techniques in Engineering Applications (ICTEA-2021) Organized by Department of Mathematics, Graphic Era Deemed To be University, UK, from 03-12-2021 to 04-12-2021.
46. **D.D. Adhikary**, **G.K. Bose**, "Availability and cost centred preventive repair and replacement scheduling of continuous operating systems " at the 5th International Conference on Mathematical Techniques in Engineering Applications (ICTEA-2021) Organized by Department of Mathematics, Graphic Era Deemed To be University, UK, from 03-12-2021 to 04-12-2021.
47. **G. K. Bose**, K.K.Mohapatra, "Experimental Investigation and Optimization of EDM Process While Machining Ti Alloy VT20 Work Material. at International Conference on Advances in Chemical & Material Science, at Indian Institute of Chemical Engineering" at Heritage Institute of Technology, from 14-16, 2022.
48. **G.K. Bose** and S. Majumdar, "Analysis of metal cutting condition by applying Finite Element Analysis using ANSYS" at national conference APPSCIICON 2022, School of Applied Science & Technology, MAKAUT, WB from 27-28 May, 2022.
49. S. Danda, S. Sarkar, **B. Bepari**, K. Saha & B. N. Lahiri, In: Singh, L.P., Bhardwaj, A., Iqbal, R., "Evaluation of Driving Postures of Electric Loco Goods Pilots Using Muscle Fatigue Assessment in WAG7 Locomotives" Khanzode, V. (eds) Proceedings of International Conference of HWWE 2019, Productivity with Health, Safety, and Environment. Design Science and Innovation. Springer, Singapore. Published on: 14 May 2022, PP: 137-148, Print ISBN978-981-16-7360-3, Online ISBN978-981-16-7361-0, Publisher Name: Springer, Singapore, https://doi.org/10.1007/978-981-16-7361-0_14.
50. S. Danda, S. Sarkar, **B. Bepari**, K. Saha, B. N. Lahiri, "Braking: The Most Strenuous Task of Locomotive Driving" (2022). In: Chakrabarti, D., Karmakar, S., Salve, U.R. (eds) Proceedings of International conference of Society of ergonomics, Ergonomics for Design and Innovation. HWWE 2021. Lecture Notes in Networks and Systems, Vol 391, PP 319-327. Published on: 07 June 2022, Online ISBN: 978-3-030-94277-9, Springer, Cham. https://doi.org/10.1007/978-3-030-94277-9_28.

FOOD TECHNOLOGY

51. **S. Ray**, A. Mukherjee, U. Ghosh, "Utilization of agro-industrial, food processing wastes and pollutants for manufacture of products of industrial value: A review". International Conference on Advances in Chemical and Material Sciences (ACMS-2022); IICHE Platinum Jubilee Year. Heritage Institute of Technology, Kolkata, West Bengal, 2022.
52. **S. Ray**, A. Mukherjee, U. Ghosh, "Valorisation of sugar industry waste bagasse as a fermentation media for *Saccharomyces cerevisiae* MTCC 180 and optimization of conditions for bioethanol production". International Conference on Emerging Technologies in Food Processing II (ETFP-2022). Ghani Khan Choudhury Institute of Engineering and Technology (GKCIET), Malda. West Bengal, 2022.

MASTER OF BUSINESS ADMINISTRATION

53. P. Mahapatra, A. Dey & **A. Santra**, 'Online Purchasing-behavior Analysis on Social Media' in International conference on 'Rethinking Business strategies by reshaping business perspectives in the current business environment' May 13-14, 2022 organized by Dept. of Management & Social Science, Haldia Institute of Technology, 147-161, Excel Publication
54. **M. Bag** & S. Biswas, "'Fear Not': Exploring how Psychological Safety is cultivating resilience and high performance work environment in the post COVID phase", International conference on 'Rethinking Business strategies by reshaping business perspectives in the current business environment' May 13-14, 2022 organized by Dept. of Management & Social Science, Haldia Institute of Technology, 124-127, Excel Publication
55. **S. Bhattacharya**, "Artificial Intelligence (AI) and Retailing: A Literature Review' in International conference on 'Rethinking Business strategies by reshaping business perspectives in the current business environment' May 13-14, 2022 organized by Dept. of Management & Social Science, Haldia Institute of Technology, 38-50, Excel Publication.
56. **R.K. Das and S.K. Das**, "Inevitability of Electronic Instrumentation Information System (EIIIS) in Corporate Marketing MIS", in International conference on 'Rethinking Business strategies by reshaping business perspectives in the current business environment' May 13-14, 2022 organized by Dept. of Management & Social Science, Haldia Institute of Technology, 132-146, Excel Publication
57. **S. Mishra and W. Biswas**, "Exploring a Sustainable working Model amidst Uncertainties: Business Perspective through the Lens of Resilience and Synergism", in International conference on 'Rethinking Business strategies by reshaping business perspectives in the current business environment' May 13-14, 2022 organized by Dept. of Management & Social Science, Haldia Institute of Technology, 77-82, Excel Publication
58. **S. Mishra, D. Das, D. Chakrabarty and A. Giri**, "Impulse Buying of Apparel Sector in India" in International conference on 'Rethinking Business strategies by reshaping business perspectives in the current business environment' May 13-14, 2022 organized by Dept. of Management & Social Science, Haldia Institute of Technology, 181-185, Excel Publication
59. **I. Bandyopadhyay**, "A Study on the Effect of Zombie Firms on Advanced Economies" in International conference on 'Rethinking Business strategies by reshaping business perspectives in the current business environment' May 13-14, 2022 organized by Dept. of Management & Social Science, Haldia Institute of Technology, 112-117, Excel Publication

MASTER OF COMPUTER APPLICATIONS

60. **M. Nandan**, S. Dey and S. Mitra, "Tweet Classification and Sentiment Analysis of Covid-19 Epidemic by Applying Hybrid Based Techniques", accepted for publication in the "IEEE VLSI DCS 2022".
61. S. Das, P. P. Archarya, H. Mondal and **M. Nandan**, "A Study on Machine Learning approach for augmenting Online Digital Learning", accepted for publication in the International Conference on Emerging Trends in Mathematical Sciences & Computing (IEMSC-22), Wiley, Feb. 4-6, 2022.
62. **M. Nandan**, S. Chatterjee, A. Parai and O. Bagchi, "Sentiment Analysis of Tweet Classification by applying Lexicon Based and Machine Learning Techniques", published in the Proceedings of the 3rd International Conference on Communication, Devices and Computing (ICCDC 2021) – Lecture Notes in Electrical Engineering (LNEE), vol. 851, pp. 591-606 (2022), Springer, Singapore, [ISSN: 978-981-16-9153-9], DOI: https://doi.org/10.1007/978-981-16-9154-6_55.
63. S. Chatterjee, **M. Nandan**, A. Ghosh and S. Banik, "DTNMA: Identifying Routing Attack in Delay-Tolerant Network", published in Cyber Intelligence and Information Retrieval (CIIR 2021) – Lecture Notes in Networks and Systems (LNNS, Scopus), vol. 291, pp. 3-15 (2021), Springer, Singapore, [ISSN: 978-981-16-4283-8], DOI: https://doi.org/10.1007/978-981-16-4284-5_1.
64. S. Mitra, **M. Nandan** and R. Sarkar, "Breast Cancer Detection using Transfer Learning Techniques in Convolutional Neural Networks", accepted for publication in the Proceedings of the 7th International Conference on Emerging Applications of Information Technology (EAIT 2022) – Lecture Notes in the Network and Systems (LNNS), Springer, Singapore, organized by the Computer Society of India (CSI), Kolkata Chapter from 30-31st March, 2022.
65. S. Sarkar and **M. Nandan**, "Password Strength Analysis and its Classification by Applying Machine Learning Based Techniques", accepted for publication in IEEE Xplore in the Proceedings of the 2nd IEEE International Conference on Computer Science, Engineering and Applications (IEEE ICCSEA 2022) organized by the Dept. of CSE, GIET University, Gunupur to be held on 8th September, 2022 .
66. S. Das, P. P. Archarya, H. Mondal and **M. Nandan**, "A Study on Machine Learning approach for augmenting Online Digital Learning", accepted for publication in the Proceedings of the International Conference on Emerging Trends in Mathematical Sciences & Computing (IEMSC-22), Wiley, Feb. 4-6, 2022.
67. **M. Jana**, S. Joardar, B. Jana, "A New reversible Data Hiding Scheme by Altering Interpolated Pixels Exploiting Neighbor Mean Interpolation (NMI)". International Conference on Computational Intelligence in Pattern Recognition, 393-402, 2022