

PERSONAL DETAILS

Name : Dr. Indrani Das

Official Address : Department of Computer Science,
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Google Scholar: <https://scholar.google.com/citations?user=w-RH80UAAAAJ&hl=en>

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EDUCATIONAL QUALIFICATIONS

- Ph.D. , Jawaharlal Nehru University, New Delhi.
- M.Tech., Allahabad Agricultural Institute-Deemed University, Uttar Pradesh.
- B.E, Govind Ballabh Pant Engineering College, Pauri Garhwal, Uttarakhand.

RESEARCH INTEREST

- Mobile Ad Hoc Networks, Vehicular Ad Hoc Networks, Wireless Sensor Networks, Internet of Things.

Member of Professional Body

- International Association of Engineers (IAENG) Membership No. 106448
- International Association of Computer Science and Information Technology (IACSIT)
Member NO.:80338337

PROFESSIONAL EXPERIENCE

- Assistant Professor, Dept. of Computer Science, Assam University, Silchar. (February, 2008 to Present).

RESEARCH PUBLICATIONS

International Conferences

- **I. Das**, R. N. Shaw and S. Das, "Performance Analysis of Wireless Sensor Networks in Presence of Faulty Nodes," 2020 IEEE 5th International Conference on Computing Communication and Automation (ICCCA), Aurel Vlaicu University of Arad, Romania &

Galgotias University, India, Greater Noida, India, 2020, pp. 748-751, doi: 10.1109/ICCCA49541.2020.9250724. (Indexed in Scopus)

- **I. Das**, R. N. Shaw and S. Das, "Analysis of Effect of Fading Models in Wireless Sensor Networks," 2020 IEEE International Conference on Computing, Power and Communication Technologies (GUCON), Greater Noida, India, 2020, pp. 858-860, doi: 10.1109/GUCON48875.2020.9231201. (Indexed in Scopus)
- **I. Das**, S. Das, S. Sahana and A. Kumar, "A Two layer secure image encryption technique," 2019 International Conference on Computing, Communication, and Intelligent Systems (ICCCIS), Greater Noida, India, 18-19 Oct. 2019, pp. 176-178. (Indexed in Scopus)
- M. F. Khan and I. Das, "A study on quality-of-service routing protocols in mobile ad hoc networks," 2017 International Conference on Computing and Communication Technologies for Smart Nation (IC3TSN), Gurgaon, 2017, pp. 95-98, doi: 10.1109/IC3TSN.2017.8284458.
- Sanjoy Das , Indrani Das, BipulShyam Purkayastha, Ram Shringar Raw, and Subrata Sahana, "Effect of traffic density patterns on the performance of routing protocols for VANETs", IEEE International Conference on Computing Communication and Automation (ICCCA-2015), 15-16 May, 2015, PP.498-501.(DOI:10.1109/CCAA.2015.7148428).(Indexed in Scopus)
- S.Das, R. S. Raw and I. Das, "Performance Analysis of Ad Hoc Routing Protocols in City Scenario for VANET", In the Proc. Of American Institute of Physics, (2nd International Conference on Methods and Models in Science and Technology : ICM2ST-11, Nov.19-20, 2011, Jaipur, Rajasthan), pp.257-261, DOI:10.1063/1.3669968.
- Indrani Das, D.K.Lobiyal, C.P.Katti, Effect of Mobility Models on the Performance of Multipath Routing Protocol in MANET, Published in the proceeding of fourth International Conference on Advances in Computing and Information Technology (ACITY 2014), Volume Editors: Dhinakaran Nagamalai, Sundarapandian Vaidyanathan, May 24~25, 2014, Delhi, India.

Book Chapters

- Suklabaidya S., Das I. (2021) IoT as a Platform: For Smart Home Analysis and Monitoring of Fire Parameters: Advanced Computing and Intelligent Technologies, pp. 329-338
- Das, S., Das, I., Shaw, R. N., & Ghosh, A. (2021). Advance machine learning and artificial intelligence applications in service robot. In *Artificial Intelligence for Future Generation Robotics* (pp. 83-91). Elsevier. ISBN: 9780323854986, <https://doi.org/10.1016/B978-0-323-85498-6.00002-2>.

- Suklabaidya S., Das I. (2021) Framing Fire Detection System of Higher Efficacy Using Supervised Machine Learning Techniques. In: Bansal J.C., Fung L.C.C., Simic M., Ghosh A. (eds) Advances in Applications of Data-Driven Computing. Advances in Intelligent Systems and Computing, vol 1319. Springer, Singapore. https://doi.org/10.1007/978-981-33-6919-1_9
- Khan M.F., Das I. (2021) Analysis of Various Mobility Models and Their Impact on QoS in MANET. In: Bansal J.C., Paprzycki M., Bianchini M., Das S. (eds) Computationally Intelligent Systems and their Applications. Studies in Computational Intelligence, vol 950. Springer, Singapore. https://doi.org/10.1007/978-981-16-0407-2_10.
- Indrani Das and Sanjoy Das. "Geocast Routing Protocols for Ad-Hoc Networks: Comparative Analysis and Open Issues." Cloud-Based Big Data Analytics in Vehicular Ad-Hoc Networks, edited by Ram Shringar Rao, et al., IGI Global, 2021, pp. 23-45. <http://doi:10.4018/978-1-7998-2764-1.ch002>. ISBN. 9781799827641.
- Das I., Shaw R.N., Das S. (2021) Location-Based and Multipath Routing Performance Analysis for Energy Consumption in Wireless Sensor Networks. In: Favorskaya M., Mekhilef S., Pandey R., Singh N. (eds) Innovations in Electrical and Electronic Engineering. Lecture Notes in Electrical Engineering, vol. 661. pp 775-782, Springer, Singapore. https://doi.org/10.1007/978-981-15-4692-1_59. ISBN: 978-981-15-4691-4.
- Das I., Shaw R.N., Das S. (2021) Analysis of Energy Consumption of Energy Models in Wireless Sensor Networks. In: Favorskaya M., Mekhilef S., Pandey R., Singh N. (eds) Innovations in Electrical and Electronic Engineering. Lecture Notes in Electrical Engineering, vol 661. Springer, Singapore. https://doi.org/10.1007/978-981-15-4692-1_57, ISBN: 978-981-15-4691-4.
- Indrani Das, Rabindra Nath Shaw, Sanjoy Das, "Analysis of Energy Consumption in Dynamic Mobile Ad Hoc Networks. In: Jain L., Tsihrintzis G., Balas V., Sharma D. (eds) Data Communication and Networks. Advances in Intelligent Systems and Computing, Vol. 1049. Springer, Singapore, 2020. PP. 235-243. ISBN 978-981-15-0131-9.
- Khan M.F., Das I. (2019) An Investigation on Existing Protocols in MANET. In: Saini H., Sayal R., Govardhan A., Buyya R. (eds) Innovations in Computer Science and Engineering. Lecture Notes in Networks and Systems, vol 74. Springer, Singapore. https://doi.org/10.1007/978-981-13-7082-3_26. ISBN 978-981-13-7081-6.

- Das S., Das I., Singh R.P., Johri P., Kumar A. (2019) Trust-Based Scheme for Location Finding in VANETs Using Trustworthiness of Node. In: Jain L., E. Balas V., Johri P. (eds) Data and Communication Networks. Advances in Intelligent Systems and Computing, vol 847. Springer, Singapore , pp 43-55, 2018. ISBN-978-981-13-2253-2.
- Sanjoy Das , Ram Shringar Raw, Indrani Das and Rajib Sarkar, “Performance analysis of routing protocols for VANETs with Real Vehicular Traces”, in D. P Mohapatra et al., (Eds.): Advances in Intelligent Systems and Computing, Vol.243, Springer-Verlag Berlin Heidelberg ,2014, pp. 45-56. ISBN : 978-81-322-1664-3, DOI: 10.1007/978-81-322-1665-0_5.
- Das, I., Lobiyal, D.K. & Katti, C.P., Effect of Mobility Models on the Performance of Multipath Routing Protocol in MANET, Dhinakaran Nagamalai Sundarapandian Vaidyanathan (Eds)Computer Science & Information Technology, AIRCC, PP. 149 – 155, 2014. ISBN : 978-1-921987-22-9.
- Indrani Das, Bipul Shyam Purkayastha and Sanjoy Das, “Recent development and challenges in Mobile Ad Hoc Network”, National Seminar on Emerging Trends in Advanced Networking and Cloud Computing, 31st October-1st November, 2014,Shillong College, Shillong, India. Computer Science, Few Newer Perspectives, Dr. M.N Bhattacharjee et al., International publishers, EBH publisher. ISBN 978-93-83252-80-0

Journals

- Indrani Das and Sanjoy Das, “Energy Efficient Cluster Analysis for Heterogeneous Wireless Sensor Networks”,. Wireless Pers Commun (2021). <https://doi.org/10.1007/s11277-021-08638-2> (SCI Indexed, Impact Factor. 1.671).
- Munsifa F Khan and Indrani Das, “Implementation of Random Direction-3D Mobility Model to Achieve Better QoS Support in MANET”, International Journal of Advanced Computer Science and Applications (IJACSA), Vol.11, Issue.10, pp.195-203, 2020 (ISSN No. 2156-5570). (Indexed in Scopus).
- Munsifa F Khan and Indrani Das, “Performance Evaluation of Routing Protocols in NS-2 and NS-3 Simulators”, International Journal of Advanced Trends in Computer Science and Engineering, Vol.9, Issue.4, pp.6509-6517, 2020 (ISSN. NO. 2278- 3091). (Indexed in Scopus).

- Munsifa F Khan and Indrani Das, “EFFECT OF DIFFERENT PROPAGATION MODELS IN ROUTING PROTOCOLS”, International Journal of Engineering and Advanced Technology (IJEAT) ISSN: 2249 – 8958, Volume-9 Issue-2, pp. 3975- 3980, December, 2019. (Indexed in Scopus).
- M. F. Khan and I. Das, “Performance Evaluation of Routing Protocols in NS-2 and NS-3 Simulators,” Int. J. Adv. Trends Comput. Sci. Eng., vol. 9, no. 4, pp. 6509–6517, 2020. . (Indexed in Scopus).
- Indrani Das, Multipath Routing Protocols for Ad Hoc Networks- a meticulous Study and Open Issues , Compliance Engineering Journal, Volume 10, Issue 8.,2019.
- Sanjoy Das, Subrata Sahana, Indrani Das, “Energy Efficient Area Coverage Mechanisms for Mobile Ad Hoc Networks”, Wireless Personal Communication (2019). Volume 107, Issue 2, pp 973–986 ,2019. (SCI Indexed, Impact Factor. 1.671).
- Das, I., Lobiyal, D.K. & Katti, C.P. Multipath routing in mobile ad hoc network with probabilistic splitting of traffic. Wireless Networks, 22, 2287–2298 (2016). <https://doi.org/10.1007/s11276-015-1093-y>. (SCI Indexed, Impact Factor. 2.602).
- Das, I., Lobiyal, D.K. & Katti, C.P. Effect of node mobility on AOMDV protocol in MANET, International Journal of Wireless & Mobile Networks (IJWMN) Vol. 6, No. 3, June 2014, pp.91-99. 2014.
- Das, I., Lobiyal, D.K. & Katti, C.P. , Analysis of Multipath Routing in Random Ad Hoc Networks Scenario, Research Journal of Applied Sciences, Engineering and Technology, 8(16): 1807-1813, 2014. (Indexed in Scopus)
- Das, I., Lobiyal, D.K. & Katti, C.P. , An Analysis of Link Disjoint and Node Disjoint Multipath Routing for Mobile Ad Hoc Network, International Journal of Computer Network and Information Security(IJCNIS), Vol. 3, 52 pp. 52-57,2016. (Indexed in Scopus)
- Das, I., Lobiyal, D.K. & Katti, C.P, Queuing Effect on Multipath Routing in Mobile Ad Hoc Networks, I.J. Information Engineering and Electronic Business Vol. 8, Issue.1, PP. 62-68, 2016.

Invited Talks:

- Title: The Internet a Real Threat to Environment, National Seminar on “Environmental Challenges: Impact and Assessment (NSECIA-2021)”, K. P. M. Government Girls Degree College, Aurai, Bhadohi, UP-221301, India, 2-3 March 2021.
- Title: Role of Information Technology in Management of COVID-19, A Two Days International Webinar on “Covid-19 Crisis and Management”, K. P. M. Government Girls Degree College, Aurai, Bhadohi, UP-221301, India, 9-10 May 2020.
- Title of Talk: “Using logical functions formatting and validations, saving and protections of excel workbook”, Two days workshop on “Data analysis using Microsoft excel for young researchers”, Assam University, Silchar.

Workshop/Training/Faculty Development Programme/Refresher Courses

- TWO –WEEK (ONLINE) REFRESHER COURSE IN COMPUTER SCIENCE on “NEXT GENERATION TECHNOLOGIES” TLC, Ramanujan College, University of Delhi, IN COLLABORATION WITH OPEN TECHNOLOGY FORUM (OTF) AND ASSOCIATION FOR PROMOTION OF FREE AND OPEN-SOURCE TECHNOLOGIES(AFROST), from 29 June -13 July, 2021.
- Two weeks National Interdisciplinary Refresher Course on “Research Methodology and Data Analysis (Sharpening Skills through MSEXCEL, SPSS, MATLAB and R)”, Teaching Learning Centre, Ramanujan College, University of Delhi in association with Indian Accounting Association, NCR Chapter. 24th March to 7th April, 2021.
- One Week AICTE-ISTE Sponsored Orientation/ refresher course on OPPORTUNITY, CHALLENGES and RESEARCH TRENDS in WIRELESS COMMUNICATION, Guru Nanak Institutions Technical Campus, Hyderabad, Telangana. 13-18th March 2021.
- Two Week Industrial Training on Cyber Security and Networking, Organized By Advanced Level Telecom Training Centre (ALTTC), Ghaziabad, India. 10-24th March 2021.
- One Week Faculty Development Programme on “Academic Writing”, Teaching Learning Centre, Ramanujan College University of Delhi under the aegis of MINISTRY OF HUMAN RESOURCE DEVELOPMENT PANDIT MADAN MOHAN MALAVIYA NATIONAL MISSION ON TEACHERS AND TEACHING, Delhi. 18-24th February 2021.

- Two Week Refresher Course / Faculty Development Programme on “Advanced Research Methodology: Tools and Techniques.” Organized by Teaching Learning Centre, Ramanujan College University of Delhi under the aegis of MINISTRY OF HUMAN RESOURCE DEVELOPMENT PANDIT MADAN MOHAN MALAVIYA NATIONAL MISSION ON TEACHERS AND TEACHING, Delhi. 30th January – 14th February 2021.
- Two Week Faculty Development Programme on Blended Learning: Alternative Dimensions., Organized by Teaching Learning Centre, Ramanujan College University of Delhi under the aegis of MINISTRY OF HUMAN RESOURCE DEVELOPMENT PANDIT MADAN MOHAN MALAVIYA NATIONAL MISSION ON TEACHERS AND TEACHING, Delhi. 12-29th January 2021.
- Two Week Faculty Development Programme on ICT based Paradigm of E-Teaching and E-learning: Digital Pedagogy. Organized by Dept. of Computer Science, Mata Sundri College for Women, University of Delhi, Delhi., 15-30th September 2020.
- One Week national Faculty Development Program On “ Computer Networks Simulation Using NS-2” Organized by Dept. of Computer Science and Engg, MGIT Hyderabad, Telangana.10-14th August 2020.
- One week workshop on “Data Science” Organized by Department of Computer Science & Engineering, NIT Arunachal Pradesh, 04-08th August 2020.
- One Week national Faculty Development Program On “Simulation and Modelling of Data Communications & Networks” Organized by Dept. of Electronic and Comm. Engg, MGIT Hyderabad, Telangana, 27-31st July 2020.
- One Week Online National Instructional Workshop on CRYPTOLOGY, Organized by School of Computer and Systems Sciences, JNU, New Delhi in association with CRSI ,22-26 July 2020.
- One Week Online Lecture Series on “Trends in Artificial Intelligence and Machine Learning” Organized by North Orissa University, Odisha, India.,16-21st July 2020.
- One Week International Faculty Development Program on “Recent Trends in Computer Science & IT” Organized by Department of Computer Science & Engineering, Raj Kumar Goel Institute of Technology, Ghaziabad, in Association with International Association of Professional & Fellow Engineers, Delaware, USA Indo-UK Confederation of Science,

Technology & Research LTD., London, UK International Accreditation Council for Conference & Professional Excellence, Delaware, USA, 13-17th July 2020.

- One Week Faculty Development Programme on “Exposure & Rejuvenation of Technologies in changed Era of the World”, Organized by Department of Electronics & Communication Engineering, Raj Kumar Goel Institute of Technology, Ghaziabad, U.P. India., 06-10th July 2020.
- One Week Online Faculty Development Program on Machine Learning and Its Applications Using Python, Organized by Ajay Kumar Garg Engineering College, MCA, Ghaziabad in Collaboration with Consilio Intelligence Research Lab, Noida, UIET-CSJMU Kanpur and Dr. H.S. Gour Vishwavidyalaya, Sagar, M.P, 29th June -03rd July 2020.
- One Week National Faculty Development Program on “Applications of Machine Learning and Deep Learning”, Organized by Raj Kumar Goel Institute of Technology, Ghaziabad organized by the Department of Computer Science and Engineering. 24-28th June 2020.
- One Week Workshop on “ The Growing Role of IOT in Latest Technological Trends”, Organized by School of Information Technology, Rajiv Gandhi Proudhyogiki Vishwavidyalaya, Bhopal in association with WILEY India Pvt. Ltd., 22-26th June 2020.
- One Week International Online Faculty Development Programme on RECENT ADVANCES IN COMPUTER SCIENCE AND ALLIED DOMAINS (RACSAD 2020), Organized by Department of CSE, Sharda University, Greater Noida, India. 08-12th June 2020.
- One Week AICTE Training And Learning (ATAL) Academy Online FDP on "Internet of Things(IoT)", Organized by AICTE and JAWAHARLAL NEHRU UNIVERSITY, New Delhi, 31st May 2020- 04th June 2020.
- One Week FDP on "Emerging Research Trends in Computer Science and IT”, Organized by BVICAM, New Delhi in collaboration with AICTE,CSI,IEEE,ISTE Delhi Sections, 11-15th Mar 2020.
- 01st 3-Week Refresher Course in Computational & Mathematical Studies (Computer Science, Mathematics & Statistics), Jamia Millia Islamia University, New Delhi. 29 August 2018- 19 September 2018.
- Cloud Computing and Network (Cloud-NET-2017), NIT, Silchar, 11-16 March 2017.
- 5 days workshop on VLSI design using CADENCE, Organized by Department of Electronics and Communication Engineering, NIT , Silchar- Assam, 1-5 Nov, 2017.

- Two day workshop on IoT (Internet of Things), Organized by Department of Electronics and Communication Engineering, NIT, Silchar- Assam. 12-13th Oct.2015.
- High performance computing, NIT, Silchar, 25-31 March 2015.
- ISI-AU Workshop on Intelligent Data Analysis: Theory and Application, Organized by Computer Vision and Pattern Recognition Unit, ISI, Kolkatta and Department of IT, Assam University, Silchar, 1-5 March 2011.
- Refresher course in Computer Science and Technology, Jawaharlal Nehru University, New Delhi, 20th August- 24th September 2010.
- Special Winter School on Frontiers in Humanities, Jawaharlal Nehru University, New Delhi, 29th December 2008 -23rd January 2009.
- One Week Training on “Suse Linux Fundamentals”, GBPEC, Pauri-Garhwal, Utrakhand, 20th Feb.- 24th Feb 2006.
- Workshop on “Blue Print for Success”, IMS, Dehradun (UA), 18th Nov.-20th Nov. 2006.

Academic Contributions:

Session Chair/TPC/Organizing Committee Member:

- Session Chair: 2021 INTERNATIONAL CONFERENCE ON ADVANCED COMPUTING AND INTELLIGENT TECHNOLOGIES(ICACIT2021)” Jointly organized by School of Computing Science & Engineering, School of Electrical, Electronics & Communications Engineering, Galgotias University and Department of Information Engineering and Mathematics Università Di Siena, Italy during March 20-21, 2021
- TPC Member : International Conference on Computing, Communication, and Intelligent Systems 19th-20th February, 2021 Sharda University, Greater Noida, India.
- Session Chair: IEEE 5th International Conference on Computing Communication and Automation (ICCCA), Aurel Vlaicu University of Arad, Romania & Galgotias University, India ,Greater Noida, India, 2020.
- TPC Member: INTERNATIONAL CONFERENCE ON COMPUTING, POWER AND COMMUNICATION TECHNOLOGIES 2019 (GUCON) is being organized by Galgotias University; India on September 27-28, 2019.
- Organizing Member: IEEE International Conference on Computing Communication and Automation (ICCCA-2017), 5-7th May 2017, India

- Organizing Member: International Conference on Signal, Networks, Computing, and Systems [ICSNCS-2016], Springer, Jawaharlal Nehru University, New Delhi 25-27th February 2016.
- TPC Member: IEEE International Conference on Computing Communication and Automation (ICCCA-2016), 29-30 April, 2016, India.
- TPC Member: IEEE International Conference on Computing Communication and Automation (ICCCA-2015), 15-16 May, 2015, India.
- TPC Member : Sixth International conference on Database Management Systems (DMS-2015), Ibis Zurich, Switzerland, January 2-3, 2015.
- TPC Member : -International Conference on Signal and Image Processing (SIGI 2015), Bangalore, India, April 25-26 , 2015.
- TPC Member- Third International Conference on Data Mining and Knowledge Management Process, Dubai, UAE, November , 7-8, 2014.
- TPC Member- Third International Conference on Control, Modelling, Computing and Applications, Dubai, UAE, November , 7-8, 2014.
- TPC Member-International Conference on Computer Science & Engineering (CSEN-2014), Bangalore, India, October 25-26, 2014.