Name : Prof. (Dr.) Prodipto Das

Official Address : Professor

Department of Computer Science,

Assam University, Silchar

(Central University under Govt of India),

Silchar - 788011, Assam, India

Phone : +91 9435372034

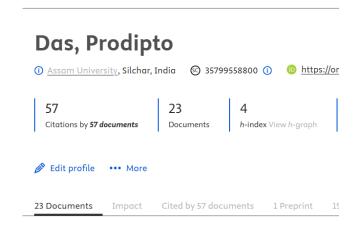
+91 8638318387 (Whatsapp)

Email : <u>prodiptodas@gmail.com</u>

prodipto.das@aus.ac.in



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Citations	287	193
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i10-index	8	4
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Google Scholar Link: https://scholar.google.com/citations?hl=en&user=KZZfip0AAAAJ

Scopus Author Link: https://www.scopus.com/authid/detail.uri?authorId=35799558800

Web of Science: https://publons.com/researcher/3669148/prodipto-das/

https://www.webofscience.com/wos/author/record/2011687

DBLP Computer Science Bibliography, Germany: https://dblp.uni-trier.de/pid/116/2919.html

Orchid Id: https://orcid.org/0000-0003-0026-8907

Web of Science Researcher ID: AAP-3712-2020

Vidwan id: 107972 / 262456

EDUCATIONAL QUALIFICATIONS

- Visiting Fellow, University of Plymouth, United Kingdom Year: 2012
- Ph.D. in Computer Science, Assam University Silchar Year: 2007-2011

Title: Improving the Quality of Service of Mobile Communication Network in Uncertain Areas (Date of Award: 17/01/2011)

- M. Tech. (Computer Science & Engineering), Mizoram University, Aizawl Year: 2018-2021
- M. Sc. (Computer Science) from Assam University Silchar Year: 2001-2003
- B.Sc. (Computer Science) from Assam University Silchar Year: 1998-2001
- H.S. (i.e. 12th Standard) with PCM under AHSEC (Assam) College: G.C. College Silchar Year: 1996-1998
- H.S.L.C. (i.e. 10th Standard) with Adv. Mathematics under SEBA (Assam) School: BNMP H.S. School, Dholai, Assam, Year: 1996

OTHER QUALIFICATIONS

• Post Graduate Certificate in Cyber Law (PGCCL) from IGNOU Year: 2021-22

PROFESSIONAL EXPERIENCES

- Professor, Department of Computer Science, Assam University (A Central University, Govt. of India) from 17 November, 2023 to date.
- Associate Professor, Department of Computer Science, Assam University (A Central University, Govt. of India) from 17 November, 2020 to 17 November, 2023.
- Assistant Professor (Stage-III), Department of Computer Science, Assam University (A Central University, Govt. of India) from 17 November, 2017 to 17 November, 2020.
- Assistant Professor (Stage-II), Department of Computer Science, Assam University (A Central University, Govt. of India) from 17 November, 2012 to 17 November, 2017.
- Assistant Professor (Stage-I), Department of Computer Science, Assam University (A Central University, Govt. of India) from 17 November, 2008 to 17 November, 2012.
- Lecturer, Department of Information Technology, Mizoram University, Aizawl (A Central University, Govt. of India) from 5 March, 2007 to 14 November, 2008.
- Lecturer (Info. Tech.), School of Management, Tripura University, Agartala from March, 2006 to February, 2007.
- Lecturer, Department of Computer Science and Engineering, ICFAI University of Science and Technology, Agartala, Tripura from Jan, 2005 to March 2006.
- Project Executive, Planman Consultancy Ltd., Okhla, New Delhi Sept, 2004 to Jan 2005.

ADMINISTRATIVE RESPONSIBILITIES

- Proctor, Assam University, Silchar. March, 2024-March, 2026
- Nodal Officer, AU SWAYAM, 2024
- Nodal Officer (Alumni Matters) in Samarth portal, December, 2024.
- Joint Coordinator (Incubation Cell and Entrepreneurship Dev. Cell)
- Assistant Director, IQAC
- BOS Member, PDEU, Gandhinagar, 2023-2025
- Chairman, Grievance Redressal Committee (SC/ST/OBC)- July, 2023
- Coordinator, Year Long Programme on Silver Jubilee Celebration of the Department of Computer Science, Assam University, Silchar. July 2022-June 2023
- Teacher Advisor, Assam University Quiz Club-2022
- Co-ordinator & SPOC, ASSAM University Local Chapter for NPTEL & SWAYAM Courses (From July 2017- till today).
- Assistant Director, Internal Quality Assurance Cell (IQAC), Assam University (From 10/08/2016 to 31/12/2020).
- Convener, Assam University Alumni Association, Assam University (from 14/12/2020 to 09/03/2021)
- Convener, Assam University Alumni Association, Assam University (From 08/09/2016 to 08/09/2018).
- Convener, Adhoc Committee, Assam University Alumni Association, Assam University (From 01/04/2014 to 07/09/2016).
- Teacher Advisor, Assam University Quiz Club-2022-23.
- Deputy Proctor, Assam University Silchar (2011-2012).
- Member, Admission Committee of Assam University. (2017-2020).
- Member, Research Committee, Dept. of Comp. Sc., Assam University (2012-).
- Editor, Informatica Wall Magazine, Dept. of Computer Science, Assam University (2013-).
- Head i/c, Department of Information Technology, Mizoram University, Aizawl from March 2008 to September 2008.

PH.D. SUPERVISION

- a) Abhijit Paul, Title: STUDIES OF WIRELESS SENSOR NETWORKS TO MITIGATE NATURAL DISASTERS Awarded on 08.10.2015
- b) Hrituparna Paul, Title: BASE STATION POSITIONING AND LOCATION AWARE CLUSTER BASED ROUTING IN WIRELESS SENSOR NETWORKS Awarded on 31.07.2017
- c) Kefayat Ullah (PhD/2066/12) Title: TRUST COMPUTING MODELS FOR SECURITY ATTACKS IN MANET Awarded on 10.03.2018
- d) Debasish Roy (Ph.D. /2065/12) Title: SECURITY AND RELIABILITY ISSUES IN INTER VEHICULAR COMMUNICATION Awarded on 05.10.2018
- e) Ananya Roy (Ph.D./2829/15) Title: OPTIMIZATION MODEL FOR SECURITY AND PRIVACY OF INTERNET OF THINGS Submitted on 19.08.2020 Awarded on: 04/06/2021
- f) Rosy Swami (Ph.D./2828/15) Title: SECURE-RANKED MULTI-KEYWORD SEARCH OVER ENCRYPTED DATA IN UNTRUSTED CLOUD SERVER Submitted on 18.12.2020 Awarded on: 24/01/2022
- g) R. Chawngsangpuii (PhD/3066/16) Title: STUDIES OF SECURE AND RELIABLE COMMUNICATION IN IOT-MESH Submitted on 18.12.2020 Awarded on: 21/12/2021
- h) Ishita Chakraborty (Ph.D./3067/16) Title: Cloud-Assisted Data Fusion and Sensor Selection in Multi-Sink Scenario for Internet-of-Things, Awarded on 15.03.2023
- i) Sumit Biswas Title: Studies on Quantum Cryptography Protocols for Future Internet Enrollment No: 0120200066 dt. 27.08.2020
- j) Thongjam Rahul Singh Title: Studies on Machine Learning Techniques to Recognize Human Activities based on Smartphone Data Enrollment No: 0120210265 dt. 01.02.2022
- k) Sandip Kanoo Title: Blockchain in Quantum Cryptography (2023-24)
- 1) Binita Deka Broad Area: Quantum Cryptography (2025)

M.PHIL. SUPERVSION

a) Hitesh Chakraborty (Regn. No:22-130047406), Title: IMAGE PROCESSING TECHNIQUE TO DETECT FISH DISEASES, Awarded on 08.09.2016

PATENT

Sl. No.	Patent Title	Status
1	IRone Density and Quality Analysis Using NLP and Computer	Published Date: 27/09/2024

RESEARCH PROJECT

Sl. No.	Title	Cost in Lakh	Duration	Role (PI/Co-PI)	Agency
	"Establish, Develop and Manage Entrepreneurship Development Center and Incubation Centers in	5.0	2 Yrs	University Joint Coordinator	NEC & IIE

PG DISSERTATIONS

- i. Trust and Reputation Function In Wireless Sensor Network Sajal Ghosh(2011)
- ii. Implementing a New Routing Protocol in NS2 to Simulate Blackhole Behaviour Jebryn S. Talukdar(2011)
- iii. Statistical and Neural Network Models for Prediction and Forecasting Problems-

Jaya Prabha Bhura(2011)

- iv. Preventing SQL Injection using Hashing and Encryption- Debidutta Paul(2011)
- v. Leaf Image Compression and Info System- Madhumita Deb(2012)
- vi. Leaf Image Compression and Info System Shahin Shabnam (2012)
- vii. Edge Detection and Localization on Leaf of Medical Plants in MATLAB-

		S'4- D(2012)			
:::	Last Image Decredation Decreasing and Info System	Sunita Roy(2012)			
viii.	Leaf Image Degradation Restoration and Info System-	Sadhona Barman (2012)			
ix.	A Technique to Hide info within Image-	Mrinal K. Mondal(2012)			
X.	MAP Viewer: Studies & Implementation-	Swastika Das(2012)			
xi.	Comparative Simulation- Study of Various TC Prevention-				
xii.	Automated Diagnosis Info System-	Payal Chakraborty(2013)			
xiii.	Secrecy of a file using RSA Algorithm-	Arpita Roy(2013)			
xiv.	Face Recognition System-	Sourav Roy(2013)			
XV.	Video Quality Assessment Over Asterisk Server-	Debashree Kar(2013)			
xvi.	Video Quality Adaptation Schema in Video Conference-	Alimita Chakraborty(2013)			
xvii.	Online Image Editing: Implementation-	Jayanta Das (2013)			
xviii.	Design of Video Quality Matrices Measurement Tool-	Mousumi Choudhury(2014)			
xix.	Routing Simulator-	Promit Malakar(2014)			
XX.	Speech Quality Assessment Over Asterisk Server in Confer				
xxi.	Objective Quality Factor Assessment of Voice Over IP-	Chumki Sarkar(2014)			
xxii.	Importance of Video Editing & Converter Software-	Supriya Choudhury(2014)			
xxiii.	Universal Leaf Detection & Recognition System-	Daipayan Rakshit(2015)			
xxiv.	Leaf detection system based on apex angle of the leaf-	Bonani Das(2015)			
XXV.	Leaf detection system based on its LW Ratio-	Asma Khanan Tapadar(2015)			
xxvi.	Detection of leaves using symmetrical property-	Paulomi Debnath(2015)			
xxvii.	Leaf detection system based on colour intensity of the leaf-				
xxviii.	Leaf detection system based on edge of the leaf-	Abhijit Paul(2015)			
xxix.	Leaf detection system based on its shape-	Rahul Debnath(2015)			
XXX.	An Approach to Comparative Performance Analysis of				
:	MANET-	Bandana Chakraborty(2016)			
xxxi.	Face Detection using ANN-	Ariful Islam(2016)			
xxxii. xxxiii.	Object Detection from video using Neural Network- Classification of Image Categories using CNN: A deep Lea	Shantasree Kar(2016)			
XXXIII.	Classification of image Categories using Civiv. A deep Lea	Satyabrata Nath(2017)			
xxxiv.	Face recognition from Multiple Images using Deep Learnin	•			
AAAIV.	Tace recognition from Multiple images using Deep Learning	Antara Phonglo(2017)			
XXXV.	Design & Implementation of Academic Information Report	9 1			
AAAv.	Design & Implementation of Academic Information Report	Lakshmi Barman(2018)			
xxxvi.	Design & Implementation of Academic Information Report	, , ,			
AAA VI.	Design & Implementation of Academic Information Report	Ruheen Akthar Laskar(2018)			
xxxvii.	Implementation of web crawler-	Khushi Singh(2019)			
xxxviii.	Implementation of a Smart Home System-	Ratnadwip Dey(2020)			
xxxix.	Detection of Spam SMS using Naive Bayes and TF-IDF Cl	1 2 1			
7477474.	Detection of Spain Siris asing Ivario Bayes and II 181 Of	Aditya Singha			
xl.	Data analysis and Prediction of COVID Vaccination Using				
7111	Data manyons and Frederick of CO +12 + accinimizer Comg	Shibojyoti Chakraborty			
xli.	Study of Encryption Techniques with special reference to S				
xlii.	Study of Encryption Techniques with special reference to N				
xliii.	A Study on Cryptographic Encryption Techniques with special reference to RSA (2022)-				
	Diksha Dutta	(-0-2)			
xliv.	Studies on the CT Scan Images of Lungs of Covid Infected Patients- Diksha Dey (2023)				
xlv.	Studies on Chatbot -Ambia Sultana Laskar (2023)				
xlvi.	Studies on Accident-Free Road using Automotive IoT - Rohan Roy (2024)				
xlvii.	Studies of Pattern Recognition for Burmese and Assam	•			
	(2025)				

MEMBERSHIP OF PROFESSIONAL BODIES

- Senior Member, International Association of Computer Sciences & Information Technology (IACSIT), Singapore. (Member Id.: 80342879)
- Member, IEEE (Member Id. 92408080) Renew Date: 09-04-2023
- Member, Association of Computing Machineries (ACM), USA. Member Id.: 8607094

AWARDS AND RECOGNITIONS

- 1. NET Lectureship, UGC-NET, December, 2005, Ministry of HRD, Govt. of India.
- 2. Junior Research Fellowship (JRF), UGC-NET, December, 2006, MHRD, GOI.
- 3. Best Paper Award, 2007, National Conference NCSCA-2007, Bhubaneswar, Odisha.

- 4. DST International Travel Grant, 2010, DST, Govt. of India.
- 5. UGC Merge-Plan Travel Grant, 2010 from Assam University.
- 6. Active SPOC, NPTEL, IIT Kharagpur, January 6th, 2018
- 7. Active SPOC, NPTEL, IIT Kanpur, January 18th, 2019
- 8. Active SPOC, NPTEL, IIT Kanpur, February 3rd, 2019
- 9. Best Paper Award, 2020, International Conference EIMIS-2020, IEM Kolkata.
- 10. Active SPOC, NPTEL, IIT Kharagpur, 01 July, 2023.
- 11. NPTEL STAR AWARD to AUS-NPTEL Local Chapter on 1st July, 2023 at Kolkata.
- 12. Best Paper Award, International Conference MEET-2023, 29-30 Dec, 2023 at Bangkok.
- 13. Active SPOC, NPTEL, IIT Kharagpur, 25 February, 2024.
- 14. Special Active SPOC, NPTEL, IIT Kharagpur, 24 August, 2024.

CONTRIBUTION TO JOURNALS

Editorial Member, Int. Journal "Advances in Computing", SAPUB, USA, 2010-2012.

Reviewer of Refereed Int. Journal on Network Security (IJNS), Taiwan, 2011-2024.

Reviewer, Innovations in systems and software engineering (NASA Journal), Springer, 2022-2024.

Reviewer, Multimedia tools and applications, Springer, 2023.

Reviewer, SN computer science, Springer, 2022-2024.

Reviewer, Scientific Reports, Springer, 2023-2024.

Reviewer, Cluster Computing, Springer Nature, 2024.

INVITED SPEAKERS (INTERNATIONAL LEVEL)

1. Invited Talk on "IT Educators' Role during Pandemic: A Paradigm Shift" on October 6, 2021, as Resource Speaker in the International Educators' Conference "Breaking Barriers Towards a Resilient and Innovative IT Nation" October 6 to 7, 2021 organized by **Philippines Society of Information Technology Educators Foundation, Inc.** (PSITE) in partnership with **Daffodil International University, Bangladesh**.

INVITED SPEAKERS

- 1. Invited Talk on "ICT and their uses", in National Workshop at Karimganj College, September 8-10, 2011.
- 2. Keynote Address on "Mobile Networks: Current and Future Trends" at Institution of Engineers (India), Silchar Center, 22nd Feb., 2012
- 3. Invited Talk on "Programming Techniques in Computer Graphics" in a DBT funded Workshop in Karimganj College, 31st March 2012.
- 4. Invited Talk on "Quality Issues of HD Video Technology" in an International Conference, MECON 2013, Amity University, Noida, 17-18 Jan, 2013.
- 5. Invited Talk on "Quality Issues of Multimedia Communication" in a National Conference, RHEIT, 2013, Assam University Silchar, 6-7 Feb, 2013.
- 6. Invited Talk on "Network Security: Present Trends and Future Prospects" in a National Seminar on Emerging Trends in Networking and Cloud Computing, 2014, Shillong College, Shillong, 31 Oct-1 Nov 2014.
- 7. Invited Talk on "Future of Computer Technology" and Chief Guest on 7th May, 2018 at 1st Diploma in Computer Application (DCA) Convocation, Department of Computer Science, G.C. College, Silchar.
- 8. Special Talk on "Cyber Crime and Social Media" in One Day Awareness Programme at Office of the Superintendent of Police, Silchar, Assam on 30th September, 2018.
- 9. Invited Talk on "Cyber Security and Cyber Crime" in Workshop on E-learning at Head Post Office, Silchar on 9th March, 2019.
- 10. Invited Talk on "Cyber Security" and Chief Guest in Workshop on TECHNODIUM at Ramanuj Vidya Mandir, Silchar on 26th April, 2019.

- 11. Invited Talk on "MOOCs and Open Educational Resources" in ICSSR National Workshop on MOOCs and OER at Karimganj College, Karimganj on 7th September, 2019.
- 12. Invited Talk on "Online Teaching", in One Day Workshop on Modes of Online Teaching and Evaluation, IQAC Gurucharan College, Silchar, 19th October, 2020.
- 13. Invited Talk on "Cyber Security and Cyber Crime in India: A Survey on Infrastructure, Technology and Public Awareness", Lecture Series on North East Science Movement (NESM) and Bijnan Bharati, Online on 7th November, 2020.
- 14. Invited Talk on Trust in Data Analytics-A Cryptographic Study, Webinar on Data-driven Predictive Analytics, 5th-6th August, 2020, Department of Computer Science, Assam University, Silchar, 6th August, 2020.
- 15. Invited Talk on Google Class room and Google Meet, One Day Workshop on Online Classes, Womens' College Silchar, 21st August, 2020.
- 16. Invited Talk on "IoT in Agriculture: Indian Perspective", in AICTE ATAL FDP ON IOT organized by Mizoram University, Aizawl on 1st February, 2021.
- 17. Invited Talk on "C programming in Graphics Mode", in SDP on "DEVELOPMENT OF STUDENTS SKILL IN LEARNING", 31st July to 1st August, 2021 organized by Govt. Degree College, Dharmanagar, Tripura.
- 18. Invited Talk on "Cyber Crime Related Recent Issues: Tug of war for maintaining Security and Privacy", in AICTE ATAL FDP on Security and Privacy organized by Mizoram University, Aizawl on 9th August to 13th August, 2021.
- 19. Invited Talk on "Machine Learning: At a Glance", in DST Sponsored STUTI 7 Days Training Programme on Machine Learning Algorithms using Python for Beginners, 16-22 January, 2023 organized by Department of Computer Science, Assam University, Silchar on 19th January, 2023.
- 20. Invited Talk on "MOOC Courses in India: ICT based Teaching Learning Platform" on 8th September, 2023 in a Short-Term Course Organised by HRDC, Mizoram University, Aizawl.
- 21. Invited Talk on "Challenges of Cyber Security and Quantum Cryptography" on 13th March, 2024 in 5th International Multidisciplinary Conference on INFORMATION SCIENCE, MANAGEMENT RESEARCH & SOCIAL SCIENCES (IMCISMRSS 2024) 13th & 14th March 2024 Organised by AJK College, Coimbatore. (Online Mode)
- 22. Invited Talk on "E-Learning through Indian MOOC (SWAYAM PLATFORM)", at Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya, Eraligool, Karimganj, Assam on 2nd July, 2024 (Online Mode)
- 23. Invited Talk on "Quantum Cryptography and its connection with Mathematics: RSA and Shor's algorithm", UGC MMTTC Two Weeks Online Refresher Course in Computational Mathematics and Applications, August 5-19, 2024, Assam University, Silchar on 10-08-2024 (Online Mode)
- 24. Invited Talk on "Vehicular Adhoc Networks to Automotive IOT", DST-SERB Sponsored Karyashala 15-20 Nov, 2024 at PDEU, Gandhinagar, Gujarat, on 20th Nov, 2024. Organised by Department of ICT and ECE, PDEU.
- 25. Invited Talk on "Digitalization of Educational Infrastructure" in the ONLINE SHORT TERM COURSE on NEP 2020 Organised by Department of Business Administration, Assam University under MMTTC, AUS on 23rd Nov, 2024.
- 26. Invited Talk on "SWAYAM COURSES", Patharkandi College, Sribhumi, Assam on 10th January, 2025.
- 27. Invited Talk on "E-LEARNING THROUGH SWAYAM PLATFORM", Pandit Deendayal Upadhyay Adarsh Mahavidyalaya, Eraligool, Sribhumi, Assam on 10th January, 2025.

SESSION CHAIRED IN CONFERENCES

- 1. Session Chaired, International Conference on Advances in Electrical Engineering, at Dhaka, Bangladesh, 19th 21st December 2011.
- 2. Session Chair in International Conference on "Recent Trends on Electronics & Computer Science (IRTECS-2019)",during 18th-19th of March 2019 at National Institute of Technology Silchar (NIT), India.
- 3. Session Chair in the International Conference on Smart and Intelligent Systems (SIS-2021), Organised by Velagapudi Ramakrishna Siddhartha Engineering College, Vijayawada, AP, India on 26th February, 2021 ONLINE.
- 4. Session Chair in International Conference on "Computational Intelligence in Communications and Business Analytics (CICBA-2022)", 7-8 Jan 2022 at Department of CSE, Assam University, Silchar, India in Technical Session No 4 on 8th Jan, 2022.
- 5. Session Chair in International Conference on Intelligent Systems, Advanced Computing and Communication (ISACC-2023), 03 04 February, 2023, Department of Computer

- Science and Engineering, Triguna Sen School of Technology, Assam University, Silchar, Assam, India in Technical Session No 2.2 on 4th February, 2023.
- 6. Track Chair (Track 6: Software Engineering), SILCON 2023, International Conference of IEEE Silchar Subsection. Organised by NIT Silchar, 3-5 Nov, 2023.
- 7. Chief Guest of Valedictory Function, DST-SERB Sponsored Karyashala 15-20 Nov, 2024 at PDEU, Gandhinagar, Gujarat, on 20th Nov, 2024.

CONFERENCE/SEMINAR/WORKSHOP ATTENDED

- 1. National Seminar on Fuzzy Mathematics & App, Tripura University, 25-26 Nov. 2006
- 2. ISI-AUS Winter School on Image Processing, Assam University Silchar, 18-22 Jan 2007
- 3. National Workshop on NPTEL, IIT Guwahati, 19-21 May 2007
- 4. National Conference on CTCD at SMIT, Sikkim, India, 26-28 October 2007
- 5. IEEE Int. Conf. ADCOM 2007, 18-21 Dec 2007, IIT Guwahati, India
- 6. Short Term Course on Wired & Wireless Com. Networks, NIT Silchar, India 2009
- 7. IEEE Int. Conf. on Wireless Com. and Sensor Computing, Chennai, 2-4 Jan 2010, India
- 8. National Conference on Current Trends in Computer Science, AUS, Silchar, 22-24 Feb 2010
- 9. Int. Conf. ICINC 2010, Kuala Lumpur, Malaysia 26-28 Nov 2010
- 10. Int. Conf. ICAEE 2011, 19-21 Dec 2011, Independent University Dhaka, Bangladesh
- 11. Nat. Workshop on Higher Education & ICT, Sept. 8-10, 2011, Karimganj College, India
- 12. ISI-AUS Workshop on Comp. Info. Processing at AUS, Silchar 03-07 December 2012.
- 13. National Workshop on Analog & Mixed Signal Design, NIT, Silchar, 16-20 Jan 2012
- 14. NPTEL SPOC WORKSHOP, IIT Kharagpur, 8th July, 2017
- 15. UGC Swayam Workshop, AICTE Office, UGC-MHRD, 2nd February, 2018
- 16. NPTEL SPOC WORKSHOP, IIT Kanpur, 30th January, 2018
- 17. NPTEL SPOC WORKSHOP, IIT Kharagpur, 6th January, 2018
- 18. IEEE Int. Conf. ICCCNT, IIT Kharagpur, 1-3 July, 2020
- 19. Webinar on "AI and Cloud Technology" May 28, 2020, Mizoram University Aizawl
- 20. Webinar on "Heart to Brain Communication: Impact of RF Radiation" May 26, 2020, Mizoram University

ORIENTATION PROGRAMMES AND REFRESHER COURSES

- 1. 86th Orientation Programme at UGC-Academic Staff College, Burdwan University Burdwan, West Bengal 7-6-2012 to 4-7-2012
- 2. 4th Refresher Course on ICT at UGC-Academic Staff College, Burdwan University Burdwan, West Bengal 06-03-2013 to 26-03-2013
- 3. Refresher Course in VLSI and Nanotechnology, at UGC-HRDC, Jadavpur University, Kolkata 28-11-2016 to 17-12-2016

FACULTY DEVELOPMENT PROGRAMMES (FDP) ATTENDED

- 1. NPTEL-AICTE FDP on Demystifying Networking, July-August, 2019.
- 2. One Week Online Faculty Development Programme on LaTeX, Jointly organised by Mizoram University and IIT Bombay, from 29th June, 2020 to 3rd July, 2020.
- 3. One Week Online Faculty Development Program on Pedagogical Practices Of New India Under National Education Policy, 2020 jointly organized by Tripura University, Manipur University & Assam University, October 7 to October 11, 2020
- 4. AICTE ATAL Online FDP on IoT from 5 Jan 9 Jan, 2021 at NIT Durgapur
- 5. AICTE ATAL Online FDP on Smart Cities from 11 Jan- 15 Jan, 2021 at NIT Silchar
- 6. AICTE ATAL Online FDP on Human Computer Interaction from 15 Feb- 19 Feb, 2021 at Gauhati University
- 7. AICTE ATAL Online FDP on Animation Film Design from 17- 21 May, 2021 at FTII, Pune
- 8. AICTE ATAL Online FDP on Quantum Computing from 21-25 June, 2021 at BITS Ranchi

NPTEL COURSES COMPLETED UNDER SWAYAM PLATFORM

- 1. NPTEL Online Certification Course on Design and Analysis of Algorithms, Jan-Mar, 2019.
- 2. NPTEL Online Certification Course on Demystifying Networking, July-August, 2019.

CONFERENCE /WORKSHOP/REFRESHER COURSE ORGANISED

- 1. Joint Secretary, National Conference of Current Trends in Computer Science (CTCS 2010), February 22-24, 2010. Sponsored by, DoNER, DST, DIT & Assam University Silchar.
- 2. Co-ordinator, ISEA Workshop on Cyber Crimes and Cyber Hazards in Assam University (collaboration with CDAC Kolkata) 26th April 2012.
- 3. Co-ordinator, 3-day ISI (ACMU)-AUS Winter School on Graph Algorithms with special focus on Applications to Network and VLSI, February 22-24, 2016.
- **4.** Coordinator, Webinar on Data-driven Predictive Analytics, 5th-6th August, 2020, Department of Computer Science, Assam University, Silchar
- 5. Coordinator, e-Workshop on NPTEL Awareness, 25th May, 2021 Assam University Silchar in collaboration with IIT Madras (Zoom Platform)
- 6. Coordinator, Webinar on Recent Developments in Big Data, Cloud Computing, Quantum Computing and Hardware Technology" on 26-27 July 2021, Department of Computer Science, Assam University, Silchar
- 7. Technical Chair, International Conference RTACR-2021 Organised by Ecology and Env. Sc. Department and CSIR-NCBI, Lucknow 07-08 Oct, 2021
- 8. Organising Chair, International Conference on Advanced Computing, Machine Learning, Robotics And Internet Technologies, AMRIT-2023, 10-11, March 2023. Funded by DST-SERB, ONGC, AUS
- 9. Programme Coordinator, UGC MMTTC Two Weeks Online Refresher Course in Computational Mathematics and Applications, August 5-19, 2024, Assam University, Silchar (Online Mode)
- 10. Program Chair & Organising Secretary, Second International Conference on Advanced Computing, Machine Learning, Robotics And Internet Technologies, AMRIT-2024, 8-9 November, 2024. Funded by DBT, Podder Toyota

VISITED ABROAD FOR RESEARCH & ACADEMIC WORKS

- 1. Malaysia (Kuala Lumpur), to present a paper in ICINC-2010, Kuala Lumpur, 26-29 November, 2010.
- 2. Bangladesh (Dhaka and Sylhet), to present a paper & to chair a session in ICAEE-2011 at Independent University, Dhaka, 19-21 December, 2011.
- 3. UK (London and Plymouth), as Visiting Research Fellow, University of Plymouth, Aug-October, 2012.
- 4. Bangladesh (Dhaka), to attend Academic Agreement Signing in DIU, Dhaka, 8-9 August, 2018
- 5. Thailand (Bangkok), to present a paper in the International Conference MEET-2023, 29-30 Dec, 2023.

BOOKS PUBLISHED

- 1. Advanced Computing Applications, Databases and Networks, S. A. Begum and **P. Das** (Eds.), Narosa Publishing House Ltd., New Delhi, India, 2011. ISBN: 978-81-8487-109-8
- 2. Computer Graphics: Principles and Practices, **P. Das**, New Delhi Publishers, New Delhi, India, 2017. ISBN: 978-93-85503-56-6
- 3. Prodipto Das, Shahin Ara Begum and Rajkumar Buyya, Advanced Computing, Machine Learning, Robotics and Internet Technologies, Edited Book Vol-I & Vol II CCIS, Springer, Germany, Volume Nos. 1953-1954, 2023, ISSN 1865-0937

PUBLICATIONS(Journal, Conference and Book Chapters)

- 1. (With Sumit Biswas and Sandip Kanoo), Quantum Implementation of SHA1 and MD5 and Comparison with Classical Algorithms, Quantum Information Processing, Quantum Inf Process 23, 176 (2024). https://doi.org/10.1007/s11128-024-04396-9
- 2. (With T. Rahul Singh), A Survey on Machine Learning Techniques for Recognizing Human Activities Using Smartphone Data, Springer Conference, CICBA 2024.
- 3. (With Sumit Biswas and Sandip Kanoo), Security, Efficiency, and Practicality of Quantum Key Distribution Protocols: A Comparative Analysis, AMRIT 2024.

- 4. (With Sumit Biswas), Analysis of Quantum Cryptology and the RSA Algorithms Defence against Attacks using Shor"s Algorithm in a Post Quantum Environment, Fifth International Conference on Computational Intelligence in Communications and Business Analytics (CICBA-2023), 27-28, January, 2023, Kalyani University, WB.
- 5. (With Hitesh Chakraborty), Image Processing Technique and SVM for Epizootic Ulcerative Syndrome Fish Image Classification, International Conference on Advanced Computing, Machine Learning, Robotics and Internet Technologies (AMRIT-2023), 10-11 March, 2023, Assam University, Silchar (Accepted for publication in Springer CCIS Edited Book).
- 6. (With Ishita Chakraborty), An Efficient ACO based Routing and Data Fusion Approach for IoT Networks, SN Computer Science Journal, 2023. Special issue SWOT-AI DOI 10.1007/s42979-023-02257-3.
- 7. (With Sumit Biswas, Debashish Roy, Veeradittya Podder, Neil Balba), An Investigation of Quantum Md5 Algorithm and its Design, Implementation, and Comparative Analysis with Classical Md5, Journal of Engineering Science and Technology, October, 2023. ISSN: 1823-4690
- 8. (With Ishita Chakraborty and B. Pradhan), An Intelligent Routing for IoT Mesh Networks", Transactions on Emerging Telecommunications Technologies, 2022. SCI Journal, Impact Factor=3.310(2021). Pp. 1-25, August 2022 DOI: 10.1002./ett. 4628 ISSN: 2161-3915
- 9. (With Rosy Swami), A New Secure Data Retrieval System based on ECDH and Hierarchical Clustering with Pearson Correlation, International Journal on Innovations in Systems and Software Engineering, Springer, 2022 (Accepted), SCI Impact Factor=1.36 (2022), December, 2022 DOI:10.1007/s11334-022-00515-w. ISSN: 1614-5054 Published on 06 Dec 2022
- 10. (With Sandip Kanoo and Sumit Biswas), "The Planning and Construction of a Quantum Model of the SHA-1 Algorithm Using IBM's Qiskit", 3rd International Conference on Computer Vision, High Performance Computing, Smart Devices and Networks (CHSN 2022), December 28-29, 2022, JNTU, Kakinada (Published)
- 11. (With Santosh Satapathy), Development of a Novel End-to-end Convolutional Neural Network and Ensemble Model using Stacking Learning for Automated Sleep Staging based on Polysomnography Signals, 3rd International Conference on Computational Intelligence & IoT, ICCIIoT 2022, NIT Mizoram & NERIST, 24-25 Feb., 2023 (Abstract accepted)
- 12. (With I Chakraborty), A Simple Optimization Algorithm for IoT Environment, Advances in Intelligent Systems and Computing, 2021, 1287, pp. 105–116. (First International Conference, MMCITRE 2020, 21-23 Feb, 2020. Published Year: 2021 Organised by Pandit Deendayal Petroleum University, Gandhinagar, Gujrat (Published)-Book Chapter
- 13. (With R. Swami), Proficient Dual Secure Multi Keyword Search by Top-k Ranking based on Synonym Index and DNN in Untrusted Cloud, Lecture Notes in Networks and Systems, Springer, 244, pg. 381-391, 2021. (Published in 12th September, 2021)
- 14. (With A Roy and R Das), Generation of a Trust Model for Secured Data Transfer in IoT, International Conference on Computational Intelligence & Sustainable Technologies (ICoCIST-2021), Oct 28-30, 2021, NIT Silchar Paper ID: 134, Published as a book chapter in Algorithms for Intelligent Systems (AIS), 193, pp. 695-707, 12th February, 2022.
- 15. (With I. Chakraborty), An Optimization Algorithm for IoT Enabling Technology, Emerging Technologies in Data Mining and Information Security, Advances in Intelligent Systems and Computing, Vol. 1286, 2021, ISBN 978-981-15-9926-2 (Published)- Book Chapter
- 16. (With S. Debnath), A Trust Computing Model for Future Generation Networks, 11th International Conference on Computing, Communication and Networking Technologies, ICCCNT 2020, IEEE Explore.
- 17. (With R.Chawngsangpuii), Communication Protocol in Internet of Things, International Journal of Innovative Technology and Exploring Engineering, IJITEE, ISSN:2278-3075, 2020, IF: 1.2, Vol 9, No 6, pp. 1737-1740
- 18. (With Ananya Roy and Rajib Das), An Optimal Multilevel Encryption Technique for Securing the Data Transmission in IoT, International Journal of Engineering and Advanced Technology, IJEAT, ISSN 2249 –8958, 2020, IF: 1.2, Vol 9, No 3, pp.1239-1242

- 19. (With R. Chawngsangpuii), An Ultrasonic Sensor with a Raspberry Pi for Avoiding Obstacle, Intelligent Techniques and Applications in Science and Technology, Springer book series LAIS, volume 12, pp 330-336, 03 March, 2020.
- 20. (With Rosy Swami), An effective secure data retrieval approach using trust evaluation: HBSEE-CBC, Int. J. Information and Communication Technology, Inderscience Enterprises Ltd., ISSN: 1466-6642, 2020, IF: 2.1, Vol 17, No 4, pp. 403-421
- 21. (With Rosy Swami), Secure Ranked Multi-Keyword Search Based on Modified Blowfish algorithm and AVL Tree in Untrusted Cloud Environment, International Journal of Engineering and Advanced Technology (IJEAT) ISSN: 2249 8958, Volume-9 Issue-1, October 2019.
- 22. (With R Chawngsangpuii), An Ultrasonic Sensor with a Raspberry Pi for Avoiding Obstacle, 2019, International Conference on Innovation in Modern Science and Technology pp. 330-336, Springer Publications, 2019
- 23. (With Ananya Roy and Rajib Das), A Mediator Trust Model to Optimize the Security of IoT, International Journal of Computational Intelligence & IoT, Vol. 2, No. 3, pp. 603-606, 22 March 2019.
- 24. (With Ishita Chakraborty, Ananya Chakraborty), Sensor Selection and Data Fusion Approach for IoT Applications. In: Kalita J., Balas V., Borah S., Pradhan R. (eds) Recent Developments in Machine Learning and Data Analytics. Advances in Intelligent Systems and Computing, vol 740. Springer, Singapore, pp. 17-33, 2019
- 25. (With Kefayat Ullah), Trust-Based Routing for Mitigating Gray hole Attack in MANET, Lecture Notes in Networks and Systems, vol 24, 2018, pp. 713-721, Springer, Singapore, ISBN: 978-981-10-6889-8
- 26. (With Debasish Roy), A Modified RSA Cryptography Algorithm for Security Enhancement in Vehicular Ad Hoc Networks, Lecture Notes in Networks and Systems, vol 24, 2018, pp. 641-653, Springer, Singapore, ISBN: 978-981-10-6889-8
- 27. (With Rosy Swami), Multi-Keyword Search Based on Top-k Cosine Similarity with Co-Ordinate Matching, IEEE International Conference on Computational Intelligence and Computing Research, ICCIC 2017, IEEE Explore.
- 28. (With Hrituparna Paul), "Simulation Based Comparison of Energy Efficient Clustering Approaches for Designing a New Approach in Wireless Sensor Network", International Journal on Recent and Innovation Trends in Computing and Communication, Volume 5 Issue 6, June 2017, ISSN: 2321-8169 pp. 984 989.
- 29. (With Kefayat Ullah), "An Improved Trust Model For Mitigating Dishonest Recommendation Problem In MANET", International Journal of Advanced Research in Computer Science, Volume 8, No. 7, pp. 1055-1058, July August 2017, ISSN No. 0976-5697
- 30. (With Ishita Chakraborty), "Data Fusion in Wireless Sensor Network-A Survey", Int. J. Sc. Res. in Network Security and Communication, Volume-5, Issue-6, December 2017, ISSN: 2321-3256
- 31. (With A. Roy and R. Das), "Temperature and humidity monitoring system for storage rooms of industries", IEEE International Conference on Computing and Communication Technologies for Smart Nation (IC3TSN), 2017, pp. 99-103, DOI: 10.1109/IC3TSN.2017.8284459 (Available Online: http://ieeexplore.ieee.org)
- 32. (With R. Chawngsangpuii and R. K. Das), Security Management perspective for Internet of Things, International Journal of Engineering Science Invention, Volume 6, Issue 9, ISSN (Online): 2319 6734, ISSN (Print): 2319 6726, www.ijesi.org, September 2017, pp. 59-65
- 33. (With P K Pau1, K Kumar, B Karn, Poovammal E), "Environmental Information Systems: Tools, Technologies and Other Facets Better Green World: A Brief Conceptual Study", International Journal on Recent Researches in Science, Engineering & Technology, Vol. 4, Issue 5, 2016.
- 34. (With Prantosh Kr. Paul, Ashok Kumar, Dipak Chatterjee, Jhuma Ganguly and Minakshi Ghosh), "Green IT and Computing: Tool for Sustainable Eco Systems- A

- Message for Healthy Sports Informatics Practice", Techno LEARN: An International Journal of Educational Technology, Vol. 6, No. 2, pp. 73-80, December 2016
- 35. (With P.K. Paul, A. Bhuimali, R. Rajesh, K.L. Dangwal, J. Ganguly) "Green Computing for Eco Enriched Information Services and Systems: Environmental & Bio Informatics Perspective", Journal of Biotechnology Research, Vol. 2, No. 6, pp. 44-48, 2016, ISSN(e): 2413-3256, ISSN(p): 2413-8878
- 36. (With Hrituparna Paul), "Performance Analysis of Location Aware Cluster Based Routing Scheme in Wireless Sensor Network", IOSR Journal of Computer Engineering (IOSR-JCE), Vol. 18, Issue 6, Nov-Dec. 2016, pp. 72-76 e-ISSN: 2278-0661,p-ISSN: 2278-8727
- 37. (With Kefayat Ullah), "Trust Based Routing for Mitigating Greyhole Attack in MANET: A Rethinking Approach", International Journal of Information Science and Computing, 3(1): June, 2016, p. 43-51, ISSN: 2454-9533.
- 38. (With Abhijit Paul), "Comparative performance analysis of IEEE 802.15.4 in WSN using NS2", International Journal of Applied Science and Engineering (IJASE), 3(1), June 2015, pp. 13-20, ISSN NO: 2321-0745.
- 39. (With Hrituparna Paul), "Performance Analysis of Cluster based Routing Scheme in Wireless Sensor Network", International Journal of Latest Trends in Engineering and Technology, Vol. 7, Issue 4, 2016 pp. 291-298, e-ISSN:2278-621X
- 40. J23. (With Hrituparna Paul), "A Study and Performance Analysis of LEACH and LACBRP Routing Scheme in Wireless Sensor Network", International Journal of Computer Science and Network, Vol. 4, Issue 5, October 2015, ISSN (Online): 2277-5420 Impact Factor: 0.417, pp. 780-784.
- 41. H. Chakravorty, R. Paul and **P. Das**, "Image Processing Technique To Detect Fish Disease", International Journal of Computer Science & Eamp; Security (IJCSS), Volume 9, Issue 2, 2015, pp. 121-131 ISSN: 1985-1553
- 42. R. Paul, H. Chakravorty and **P. Das**, "Neem Leaf Aspect Ratio Measurement Using Image Processing Technique", International Journal of Research and Scientific Innovation, Volume II, Issue VI, 2015, pp. 58-60, ISSN:2321-205
- 43. H. *Chakravorty* and **P. Das**, "Simulink Model Based Fish Disease Analysis", International Journal of Information Science and Computing, Vol. 2, No. 1, June 2015, pp.41-48. ISSN: 2348-7437
- 44. D. Roy and **P.Das**, "Collision Avoidance Protocol for Inter Vehicular Communication", International Journal of Computer Applications Technology and Research, Vol. 4, Issue 10, pp. 767 776, 2015, ISSN: 2319–8656
- 45. B. Souley, **P. Das** and S. Tanko, "A Comparative Analysis of Data Compression Techniques", *International Journal of Applied Sciences & Engineering (IJASE)*, Vol. 2, No. 1, April 2014, pp. 63-82. ISSN: 2321-0745(Print)
- 46. **P. Das**, "A Qualitative Comparison of Reference Videos in Android based Mobile Devices", *International Journal of Information Science and Computing*, Vol. 1 No. 1, 2014, pp. 35-41. ISSN 2348 7437
- 47. **Paul** and **P. Das**, "Flood Prediction Model using Artificial Neural Network" *International Journal of Computer Applications Technology and Research*, Volume 3, Issue 7, pp. 473 478, 2014. ISSN: 2319–8656 (Online)
- 48. Paul and **P. Das**, "An Energy Efficient Routing Protocol for Wireless Sensor Networks for Rural Areas", Proc. of Second International Conference on Computing and Systems, 2013 (ICCS 2013), 21 22 September, 2013. (Accepted and in print Proc. with ISBN)
- 49. K. Ullah, R. Das, **P. Das** and B. S. Purkayastha, "Trust Evaluating for Secure Routing in MANET" (Abstract accepted in an IEEE National Conference on Research Trends in Computer Science and Application (NCRTCSA 2014).
- 50. **P. Das** and A. Paul, "Implementation of Flood Monitoring System using Wireless Sensor Network in Barak river", *Workshop on Analog and Mixed Signal Design*, National Institute of Technology, Silchar, 16-20 Jan 2012.

- 51. **P. Das** and A. Paul, "Design of Flood Monitoring System in Assam using Wireless Sensor Network", AUIJST, Vol. 10, No. II, 2012, pp. 44-52
- 52. R. Das, B.S. Purkayastha, **P. Das** and K. Ullah, "Simulation Study of Flooding Attack in the Mobile Ad Hoc Networks", *AU Journal of Science & Technology*, AUJST, Vol. VIII, Number II 2011, pp. 48-52. ISSN: 0975-2773.
- 53. **P. Das**, Lingfen Sun and B. S. Purkayastha, "Propagation Study during Rain on DTH Service in North East India", *AU International Journal of Science & Technology*, India, Vol. 7, No. 2, pp. 122-126, 2011. ISSN: 0975-2773 (Published)
- 54. R. Das, B.S. Purkayastha and **P. Das**, "Security Measures for Black Hole Attack in MANET: An Approach", *International Journal of Engineering Science and Technology* (*IJEST*), Vol. 3 No. 4 Apr 2011, pp. 2832-2838, ISSN: 0975-5462.
- 55. **P. Das** and B. S Purkayastha, "Improving the signal quality by reducing the uncertain errors with improved turbo codec", Advanced Computing, Databases and Networks, S. A. Begum and **P. Das** (Eds.), Narosa Publishing House Ltd., India, 2011, pp. 221-225.
- 56. R. Das, **P. Das** and B. S. Purkayastha, "Algorithms and Protocols for Mobile Ad Hoc Networks- A Comparative Study", Advanced Computing, Databases and Networks, S. A. Begum and **P. Das** (Eds.), Narosa Publishing House Ltd., India, 2011, pp. 264-270.
- 57. **P. Das,** S. Debnath and A. Paul, "Estimation of Rain Attenuation over DTH Antenna in India using DAH Model", *Proc. of International Conference on Advanced Electrical Engineering, ICAEE 2011*, Dhaka, Bangladesh.
- 58. **P. Das** and B. S. Purkayastha, "Rain Attenuation of DTH Antenna using DAH Model based on 2010 Rain Data at Silchar City", *AU International Journal of Science & Technology*, India, Vol. 6, No. 2, pp. 99-104, 2010. ISSN: 0975-2773 *Available Online: www.inflibnet.ac.in/ojs/index.php/AUJSAT*
- 59. **P. Das** and B. S. Purkayastha, "Investigation of Rain Effects over DTH and BER Modeling", *AU International Journal of Science and Technology*, India, Vol. 5, No. 2, pp. 88-92, 2010. ISSN: 0975-2773 *Available Online:* www.inflibnet.ac.in/ojs/index.php/AUJSAT
- 60. **P. Das**, B. S. Purkayastha and A. Debnath, "Large File Transfer over Wireless Environment", Proc. of the 2nd International Conference on Computer Engineering and Applications (*ICCEA 2010*), Bali Island, Indonesia, 19-21 March 2010. (Available Online: http://ieeexplore.ieee.org)
- 61. **P. Das** and B. S. Purkayastha, "Developing Telepathic Power of Network using Neural Network Approach", *Proceedings of the IEEE International Conference on Wireless Communication and Sensor Computing*, ICWCSC 2010, Chennai, 2-4 Jan 2010. (Available Online: http://ieeexplore.ieee.org)
- 62. **P. Das** and B. S. Purkayastha, "Heavy Rain Effects over Communication in Hilly Area and Echo in Voice Signal Transmission: A Simulation", *International Journal of Electronics, Communications and Computer Networks (ECCN), India* Vol. 2, No. 8, Nov., 2008, pp. 478-486. ISSN: 0973-6875
- 63. **P. Das** and B. S. Purkayastha, "Heavy Rain Effects over Communication in Hilly Area: A Simulation", *Journal of Information Technology*, IJIT, India, Sept 2008, Vol. IV, Issue 3, pp. 25-31. ISSN: 0973-2896 (Published)
- 64. **P. Das** and B. S. Purkayastha, "High Altitude Hill Area Mobile Communication Network and its Problems", *Proc. of National Conference on Current Trends of Communications and Devices* at Sikkim Manipal Institute of Technology, 26-28 October 2007.
- 65. **P. Das**, "Soft Computing: An approach to maintain accuracy using Artificial Intelligence in Industrial Operations (Mainly in the Mobile Computation in North East India)", National Seminar on Fuzzy Mathematics & Applications, Tripura University Agartala, 25-26 November 2006.

