



Ishita Chakraborty

Address Old Married Scholar Hostel |
Room No. :202
IIT Guwahati | *Ph:* +91 8811027265
Amingaon | *Email:* ishitachakraborty18@gmail.com
Guwahati, Assam- 781039
India.

Research Interests Computer networks, Cryptography, Artificial Intelligence, IoT.

Appointments Assistant Professor, Royal Group of Institutions, July 2011 - present.

Education Ph.D. in Computer Science Department, Assam University, Silchar.
Thesis: Cloud-Assisted Data Fusion and Sensor Selection in Multi-Sink Scenario for Internet-of-Things.
Advisor: Dr. Prodipto Das.

M.Tech. in Information Technology, North Eastern Regional Institute of Science and Technology, 2011 with marks 4.3/5(CGPA)
Thesis: Design of routing algorithms and end-to-end throughput Performance study in different multi-hop wireless networks.
Advisor: Prof. Md. Anwar Hussain.

B.Tech. in Information Technology, Sathyabama University, India, 2009, with marks 72%.
Thesis: QUIVER: Consistent Object Sharing For Edge Services
Advisor: Dr T. Sasikala.

Publications

Journal papers:

- [1] Chakraborty, I., Das, P. An Efficient ACO-based Routing and Data Fusion Approach for IoT Networks. SN COMPUT. SCI. 4, 808 (2023).
URL- <https://doi.org/10.1007/s42979-023-02257-3>

- [2] Chakraborty, Ishita & Das, Prodipto & Pradhan, Buddhadeb. (2022). An Intelligent Routing for Internet of Things Mesh Networks. Transactions on Emerging Telecommunications Technologies. 10.1002/ett.4628.
URL- <https://onlinelibrary.wiley.com/doi/abs/10.1002/ett.4628>
- [3] Chakraborty, I. and Das, P., 2017. Data fusion in wireless sensor network- A Survey. International Journal of Scientific Research in Network Security and Communication, 5(6), pp.9-15. ISSN: 23213256.
DOI - <https://doi.org/10.26438/ijrnsc/v5i6.915>
- [4] Md. Anwar Hussain, Md. Faiz Iqbal Faiz, and Ishita Chakraborty “Simple routing algorithm for multihop wireless network”, Journal of Emerging Trends in Computing and information science, Volume-4, Special Issue 2013, Pg.58-65. URL: <https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=7c850a62ae61c07642a85471f7ac1ed7af1230ea>
- [5] Isha Sahu, and Ishita Chakraborty “Understanding Location Manager in Android and Implementing an Optimal Image Geotagging Application”, International Journal of Computer Trends and Technology, Volume-4, Issue 6, April 2013, Pg.1682-1686. URL: <https://ijcttjournal.org/archives/ijctt-v4i6p129>

Book Chapters:

- [1] Nandy,T., Devi L.M., Chakraborty, I., 2023 . Brain tumor detection using VGG-16. In Advanced Computing, Machine Learning, Robotics and Internet Technologies. Springer, Singapore.
- [2] Chakraborty, I. and Das, P., 2021. An Optimization Algorithm for IoT Enabling Technology. In Emerging Technologies in Data Mining and Information Security (pp. 565-576). Springer, Singapore.URL - https://link.springer.com/chapter/10.1007/978-981-15-9927-9_55 DOI - 10.1007/978-981-15-9927-9_55
- [3] Chakraborty, I. and Das, P., 2021. A Simple Optimization Algorithm for IoT Environment in Mathematical Modelling, Computational Intelligence Techniques and Renewable Energy: Proceedings of the First International Conference, MMCITRE 2020 (pp. 105-116). Springer Singapore. URL- https://link.springer.com/chapter/10.1007/978-981-15-9953-8_10 DOI - 978-981-15-9953-8_10
- [4] Chakraborty, I., Chakraborty, A. and Das, P., 2019. Sensor selection and data fusion approach for IoT applications. In Recent Developments in Machine Learning and Data Analytics (pp. 17-33). Springer, Singapore. URL: https://link.springer.com/chapter/10.1007/978-981-13-1280-9_2
DOI - 10.1007/978-981-13-1280-9_2

Conference Papers:

- [1] M. R. Ahmed, N. Bhadani and I. Chakraborty, "Hateful Meme Prediction Model Using Multimodal Deep Learning," 2021 International Conference on Computing, Communication and Green Engineering (CCGE), Pune, India, 2021, pp. 1-5, URL:<https://ieeexplore.ieee.org/abstract/document/9776440> doi: 10.1109/CCGE50943.2021.9776440.
- [2] Akansha Jain, Arihant Jain, Ishita Chakraborty "Electronic Health Record using Blockchain", in IEEE International Virtual Conference on Computing, Communication and Green Engineering- 2021 (CCGE21) during 23rd -25th September 2021.
- [3] Chakraborty, I. and Das, P., 2016. A Survey on Cryptography Techniques in Proc. of National Conference on Engineering Problems and Applications of Mathematics (EPAM-2016), pp. 22-30, Tripura, India 2016.
- [4] Ishita Chakraborty, and Md. Anwar Hussain, "A Simple Joint Routing and Scheduling Algorithm for a Multihop Wireless Network," IEEE International Conference on Computer Systems and Industrial Informatics ICCSII12, AUS, Dubai, December 2012. URL: <https://ieeexplore.ieee.org/abstract/document/6454620>
- [5] Farheen Jia, Dolly Das, Ishita Chakraborty, Aniruddha Deka, "Voice Based Authentication System Using Mel Frequency Cepstral Coefficient And Vector Quantization," in the proc. Of International conference on computing and communication systems(I3CS'15) during 9-10 April,2015, organized by the Dept. of Information Technology under School of Technology of North Eastern Hill University (NEHU), Shillong and IRD, India.
- [6] Ishita Chakraborty and Upasana Sarmah, "A Simple Routing Algorithm for Multi-hop Wireless Network," in proc. Of IEEE Sponsored 9th International Conference on Intelligent Systems and Control (ISCO-2015), Jan. 2015, pp. 261 – 265. ISBN-978-1-4799-6479-6 DOI: [10.1109/ISCO.2015.7282314](https://doi.org/10.1109/ISCO.2015.7282314)
- [7] Ishita Chakraborty and Ansu Agarwal , "A Simple Routing Algorithms Based On Energy Consumption," in proc. Of IEEE Sponsored 9th International Conference on Intelligent Systems and Control (ISCO-2015), Jan. 2015, pp. 1179 – 1184. ISBN-978-1-4799-6479-6 DOI: [10.1109/ISCO.2015.7282314](https://doi.org/10.1109/ISCO.2015.7282314)

Patent Filed/Published/Granted

1. An Intelligent Sensor Based Biodegradable Waste Collection Unit, Design No.: 388951-001, Date of publication: 23/06/2023 [Published]
2. Designing Of Ultra Low Power Wi-Fi IoT Modules, File No:202331015013, Journal No. 10/2023, Date of publication:10/03/2023 [Published]

Special Recognitions (Awards)

- Member of Technical Program committee of International Conference On Advanced Computing, Machine Learning, Robotics And Internet Technologies (AMRIT-2023), 10-11 MARCH, 2023, Assam University Silchar.
- Best Paper Award at IEEE International Conference on Computing, Communication and Green Engineering (CCGE) for the paper " Electronic Health Record using Blockchain ", (Paper ID: 51), Akansha Jain, Arihant Jain, Ishita Chakraborty, 23rd -25th September, Rajarshi Shahu College of Engineering, Tathawade, Pune.
- Best Paper Award at 2nd International Conference on Emerging Technologies in data mining and Information Security, (IEMIS 2020) for the paper " An Optimization Algorithm for IoT Enabled Technology", (Paper ID: 158), Ishita Chakraborty, Prodipto Das, 2nd-4th July,2020, Institute of Engineering &Management, Kolkata.

Membership of Professional Bodies

1. IEEE annual member, (Membership Number: 99084750),2023
2. ACM annual member, (Membership Number: 4650679),2023.
3. Life Member, International Association of Engineers (IAENG), (Membership Number: 334904),2023.
4. Life Member, IEEE Collabratec, 2023.

Administrative Experiences

1. Member of Proctorial Board, 2021, The Assam Royal Global University.
2. Member of the NAAC Steering committee,2022, The Assam Royal Global University.
3. Coordinator Department of CSE, 2023, The Assam Royal Global University.
4. HoD Department of CSE, 2023, The Assam Royal Global University.

Professional

Services B.E. Projects 12 completed, 1 ongoing.

Programmes:

FDP/ Seminar/ workshop Attended:

- Completed a short-term course on “Recent Trends in Computer Vision”, conducted from December 11-15, 2023 at Department of Computer Science & Engineering, NIT Rourkela
- Participated in a national level webinar on “Industrial IoT 2021”, organized by Jai Shriram Engineering College, Tamil Nadu, on 8th May 2021.
- Attended a webinar on “Machine Learning vision on IOT”, organized by Department of Electronics and Communication Engineering, Care College of Engineering, Tamil Nadu, on 1st April 2021.

- Participated in two-day webinar on “Data-driven Predictive Analytics”, organised by Department of Computer Science, Assam University, Silchar, during 5th June – 6th June, 2020.
- Participated in one-day international webinar on “Remote Sensing: Latest Trends Perspectives”, organised by Computer Society of India, Student Branch, Assam University, Silchar and Department of Computer Science and Engineering, Assam University, Silchar, on 4th July, 2020.
- Participated and completed “One-Week Online Short Term Course on LaTeX”, conducted by Department of Information Technology, Mizoram University and Spoken Tutorial Project, IIT Bombay, during 29th June – 3rd July, 2020.
- Participated in one-day international webinar on “Quantum, Data and Algorithms”, organised by Computer Society of India, Student Branch, Assam University, Silchar and Department of Computer Science and Engineering, Assam University, Silchar, on 28th June, 2020.
- Participated in one week FDP on “Digital Image Processing and Research methodology”, organised by Karpagam College of Engineering, Tamil Naidu during 15th -19th June, 2020.
- Participated in one-day workshop on “Challenges in Cybercrime Enforcement of Cyber Security”, organised by Department of Computer Science and Engineering, Dr. M.G.R. Educational Research Institute, Chennai, on 7th July, 2020.
- Attended two days workshop on “5G Networks” organized by EICT Academy, IIT Guwahati held during 22nd-24th January, 2018.
- Participated in training programme on “MATLAB Application in Engineering” Organized by National Institute of Technical Teachers’ Training and Research (NITTTR), Kolkata during 29th May-2nd June 2017.
- Participated in one-week workshop on “Cloud Computing and Network (CLOUD-NET, 2017)”, organized by Department of Computer Science and Engineering, Under Teqip – III, NIT Silchar, during 11th-16th March, 2017.

Personal

Details

Citizenship: Indian
 Residence: Guwahati, Assam, India
 Languages: Bengali (mother tongue), English (fluent), Hindi (fluent), and Assamese (fluent)

References

Dr. Swarup Roy,
 Professor | *Tel:* +91- 906423447
 Department of Computer Science
 Sikkim University. |
 6th Mile, Samdur, Tadong, Gangtok
 Sikkim-737102 | *Email:* sroy01@cus.ac.in
 India

Dr. Prodipto Das,
Associate Professor.
Department of Computer Science
Assam University.
Silchar- 788011
India.

| *Tel:* +91-8638318387

|

| *Email:* prodiptodas@gmail.com