

PhD (NIT Durgapur)

Hello, welcome to my home page. I am presently working as an Assistant Professor in the Department of Computer Science and Engineering at the Indian Institute of Information Technology, Guwahati (IITG). I joined IITG in January 2024. Prior to that, I have served at the Kalinga Institute of Industrial Technology (KIIT), Deemed University, Bhubaneswar, Odisha, India, from June 2022 to December 2023, and the Dr. B. C. Roy Engineering College Durgapur, West Bengal, India, from January 2021 to June 2022, in the same position. I have received the B.Tech. Degree in Computer Science and Engineering (CSE) from the Jalpaiguri Government Engineering (CGE) (Mest Bengal, India; the M.Tech. Degree in Computer Science and Engineering (CSE) from the Kalyani Government Engineering College (IGEC), West Bengal, India; and the Ph.D. Degree in Computer Science and Engineering (CSE) from the National Institute of Technology Durgapur (NIT DGP), West Bengal, India, in 2013, 2015, and 2022, respectively. Assistant Professor in the Department of Computer Science and West Bengal, India, in 2013, 2015, and 2022, respectively

## Research Interests

My research interests are in the broad areas of

- · Wireless Networks
- Integrated Access and Backhaul (IAB)
  UAV Communications and Networking
- Artificial Intelligence and Deep Learn
  Natural Language Processing
  Information Retrieval

# Teaching

- Winter 2024: CS330 Software Engineering
  Winter 2024: CS331 Software Engineering lab
  Winter 2024: CS111 Data Structure Lab

## Publication

#### Journal

- Prasenjit Karmakar, Vijay K. Shah, Satyaki Roy, Krishnandu Hazra, Sujoy Saha, and Subrata Nandi, "Reliable Backhauling ir Aerial Communication Networks Against UAV Failures: A Deep Reinforcement Learning Approach", IEEE Transactions on Network and Service Management, 19, (2022), pages. 2798 2811, IEEE
- Krishnandu Hazra, Vijay K. Shah, Satyaki Roy, Swaraj Deep, Sujoy Saha, and Subrata Nandi, "Exploring biological robustness for reliable multi-UAV networks", IEEE Transactions on Network and Service Management, 18, (2021), pages. 2776 - 2788, IEEE
- Krishnandu Hazra, Tanmoy Ghosh, Avirup Mukherjee, Sujoy Saha, Subrata Nandi, Saptarshi Ghosh, and Sandip Chakraborty, "Sustainable text summarization over mobile devices: An energy-aware approach", Sustainable Computing: Informatics "Sustainable text summarization over moune of energy-aware approach", Sustainable Computi and Systems,32, (2021), pages. 100607, Elsev
- Krishnandu Hazra, Vijay K. Shah, Simone Silvestri, Vaneet Aggarwal, Sajai K. Das, Subrata Nandi, and Sujoy Saha, "Designing efficient communication infrastructure in post-disaster situations with limited availability of network resources", Computer Communications,164, (2020), pages. 54-68, Elsevier

# Book Chapters

- Tamal Mondal, Krishnandu Hazra, Praveen Kumar Sharma, Partha Sarathi Paul, Ratna Mandal, Subrata Nandi, and Sujoy Saha, "New emergency communications: implication to climate hazards", Handbook on Climate Change and Disasters, (2022), pages. 605-624, Edward Elgar Publishing
- Partha Sarathi Paul, Krishnandu Hazra, Sujay Saha, Subrata Nandi, Sandip Chakraborty, and Sajal Das., "Generating crisis maps for large-scale disasters: Issues and challenges", Wireles Public Safety Networks 3, (2017), pages. 67-98, Elsevier

## Conference

- Krishnandu Hazra, Swaraj Deep, Sujoy Saha, and Subrata Nandi, "RCPDNPT: A Tool to Deploy a Post: disaster Network Under Resource-Constraint Scenarios", Proceedings of the International Conference on Computing and Communication Systems: ISCS 2020, NEHU, Shillong, India, Lecture Notes in Networks and Systems book series (LNNS, volume 170), (2021), pages. 453-461, Springer, Singapore
- Partha Sarathi Paul, Krishnandu Hazra, Sujoy Saha, and Subrata Partha Sarathi Paul, Krishnandu Hazra, Sujoy Saha, and Subra Nandi, "Oh Dearl It's Just a Toot De Plan the Deployment of a Post-Disaster Network!", Proceedings of International Conference on Frontiers in Computing and Systems 2020, Advances in Intelligent Systems and Computing book series (AISC, volume 1255), (2020), pages. 873-880, Springer,
- Krishnandu Hazra, Vijay K. Shah, Mohd Bilal, Simone Silvestri, Sajal K. Das, Subrata Nandi, and Sujoy Saha, "A novel network architecture for resource-constrained post-disaster environments.", 11th International Conference on Communication Systems & Networks (COMSNETS-2019), (2019), pages. 328-335, IEEE
- Partha Sarathi Paul, Hridoy Sankar Dutta, Bishakh Chandra Ghosh, Krishnandu Hazra, Sandip Chakraborty, Sujoy Saha, and Subrata Nandi, "Offline crisis mapping by opportunistic dissemination of crisis data after large-scale disasters", Proceedings of the Second ACM SIGSPATIAL International Workshop on the Use of GIS in Emergency Management, (2016), pages. 1-8. ACM

## Patent

 Sujov Saha, Prithvirai Pramanik, Partha Sarathi Paul, Subrata Sujoy Saha, Prithviraj Pramanik, Partha Sarathi Paul, Subrata Nandi, Kingshuk De, Bishakh Chandra Ghosh, Hridoy Sankar Dutta, Tamal Mondal, Krishnandu Hazra, Indrajit Bhattacharya, Sandijo Chakraborty, Niloy Ganguly, "An END-TO-END SYSTEM FOR OFFLINE LOCALIZED CRISIS MAPPING AND METHOD OF OPERATION THEREOF", The Patent Office Journal No. 24/2021 (Part-2, Page 417), (2021), Indian Patent













