Curriculum Vitae for

Krishnandu Hazra

Born: July 16, 1991 — Durgapur, West Bengal, India
Nationality: Indian
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Current position

Assistant Professor, Department of Computer Science and Engineering, Dr. B. C. Roy Engineering College, Durgapur, West Bengal, India.

Areas of specialization

Computer Networks • Delay-Tolerant Networks • Post-Disaster Communications • Reliable UAV networks • Information summarization

Educational qualifications

2015 - 2021	**Ph.D (Thesis Submitted)** in Computer Science & Engineering, **National Institute of Technology Durgapur**, India
2015	**M.Tech.** in Computer Science & Engineering, **Kalyani Government Engineering College**, West Bengal, India- Grade point 8.28/10
2013	**B.Tech.** in Computer Science & Engineering, **Jalpaiguri Government Engineering College**, West Bengal, India- Grade point 8.02/10
2008	**Higher Secondary Examination**, Gopalmath High School, West Bengal Council of Higher Secondary Education, West Bengal, India- Marks 74.60%
2006	**Secondary Examination**, Gopalmath High School, West Bengal Board of Secondary Education, West Bengal, India- Marks 77.12%

Research experience

Jul 2017 - Nov 2020	**Ph.D. Research Scholar (full time)** with Institute Fellowship, funded by MHRD, Government of India, at National Institute of Technology Durgapur, India.

Sep 2015- jul 2017 **JUNIOR RESEARCH FELLOW** in the project titled "Post-Disaster Situation Analysis and Resource Management Using Delay-Tolerant Peer-to-Peer Wireless Networks", Funded by ITRA, Govt. of India, at National Institute of Technology Durgapur, India.

TEACHING EXPERIENCE

Jan 2021- till date **ASSISTANT PROFESSOR** at Dr. B. C. Roy Engineering College, West Bengal, India
Nov 2015- Nov 2020 **TEACHING ASSISTANT (DURING PH.D)** at NIT Durgapur, India.
jun 2014- jul 2015 **TEACHING ASSISTANT (DURING M.TECH)** at Kalyani Govt. Engineering College, West Bengal, India

AWARD AND ACHIEVEMENTS

2020 **BEST PAPER AWARD** in COMSYS 2020.
2020 **PUBLICITY CO-CHAIRS** at SoCIeTY 2020 workshop, Co-located with ICDCN 2020.
2013 **QUALIFIED GATE** examination.

PUBLICATIONS

JOURNAL ARTICLES

2021 **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", **Elsevier Journal of Sustainable Computing: Informatics and Systems**, September 2021 (SCIE, Impact Factor: 4.028), https://doi.org/10.1016/j.suscom.2021.100607

2021 **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 Service and Management**, May 2021 (SCIE, Impact Factor: 4.195), https://doi.org/10.1109/TNSM.2021.3077544

2020 **Krishnandu Hazra**, Vijay K. Shah, Simone Silvestri, Vaneet Aggarwal, Sajal K. Das, Subrata Nandi, and Sujoy Saha, "Designing Efficient Communication Infrastructure in Post-disaster Situations with Limited Availability of Network Resources", **Elsevier Journal of Computer Communications**, September 2020 (SCIE, Impact Factor: 3.167), https://doi.org/10.1016/j.comcom.2020.09.019

2021 Under Review Prasenjit Karmakar, Vijay K. Shah, Satyaki Roy, **Krishnandu Hazra**, Sujoy Saha, and Subrata Nandi, "Reliable Backhauling in Aerial Communication Networks against UAV Failures: A Deep Reinforcement Learning Approach", **IEEE Transactions on Network Service and Management**: Special issue on Recent Advances in the Design and Management of Reliable Communication Networks.

CONFERENCE ARTICLES

2021 **Krishnandu Hazra**, Swaraj Deep, Sujoy Saha and Subrata Nandi. 2020. RCPDNPT:A Tool to Deploy a Post-Disaster Network Under Resource-Constraint Scenarios. In Proceedings of the 3rd International Conference on Computing and Communication Systems (I3CS-2020), Springer. Pages 453-461, January 2021. https://doi.org/10.1007/978-981-33-4084-8_43

2020   Partha Sarathi Paul, **Krishnandu Hazra**, Sujoy Saha, and Subrata Nandi, "Oh dear! It's just a Tool to Plan the Deployment of a Post-Disaster Network!", In Proceedings of the 1st International Conference on Frontiers in Computing and Systems (COMSYS 2020), Jalpaiguri, India: Springer. Pages 873-880, January 2020. https://doi.org/10.1007/978-981-15-7834-2_82

2019   **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", In Proceedings of 11th International Conference on Communication Systems and Networks (COMSNETS 2019), Bengaluru, India: IEEE. Pages 328-335, January 2019. https://doi.org/10.1109/COMSNETS.2019.8711166

2017   **Krishnandu Hazra**, "Designing DTN-based Ad-hoc Network for Post-Disaster Scenarios" in 18th International Conference on Distributed Computing and Networking (ICDCN - 2017), Hyderabad, India: ACM. 6th January, 2017. (Presented in Doctoral Symposium) https://www.idrbt.ac.in/ICDCN2017/program.html

2016   Partha Sarathi Paul, Hridoy Sankar Dutta, Bishakh Chandra Ghosh, **Krishnandu Hazra**, Sandip Chakraborty, Sujoy Saha, Subrata Nandi. 2016 "Offline Crisis Mapping by Opportunistic Dissemination of Crisis Data After Large-scale Disasters." In Proceedings of the Second ACM SIGSPATIAL Workshop on the Use of GIS in Emergency Management (EM-GIS '16), Burlingame, California: ACM. Pages 9:1–9:8, October 2016. https://doi.org/10.1145/3017611.3017620

2016   Partha Sarathi Paul, **Krishnandu Hazra**, Sk. Jhohev, Anand Chowdhury, Sujoy Saha, Subrata Nandi. 2016. "PDCRPT: A Post-Disaster Networking Planner for Preparedness and Deployment." In 8th International Conference on Communication Systems and Networks (COMSNETS 2016), Bengaluru, India: IEEE. January 2016. (Presentated as Research Demo), https://www.comsnets.org/archive/2016/demos_exhibits.html

Book chapters

2021   Tamal Mondal, **Krishnandu Hazra**, Praveen Kumar Sharma, Partha Sarathi Paul, Ratna Mandal Subrata Nandi, Sujoy Saha, "New Emergency Communications: Implication to Climate Hazards" in Handbook of Climate Change and Disasters to be Published in Edward Elger (in press)

2017   Partha Sarathi Paul, **Krishnandu Hazra**, Sujay Saha, Subrata Nandi, Sandip Chakraborty, Sajal Das, "Chapter 4: Generating Crisis Maps for Large-scale Disasters: Issues and Challenges" Published in Elsevier, 2017, Book Title: Wireless Public Safety Networks3, Pages 67-98, ISBN: 978-1-78548-053-9, https://doi.org/10.1016/B978-1-78548-053-9.50004-4

Patent

2019   Sujoy Saha, Prithviraj Pramanik, Partha Sarathi Paul, Subrata Nandi, Kingshuk De, Bishakh Chandra Ghosh, Hridoy Sankar Dutta, Tamal Mondal, **Krishnandu Hazra**, Indrajit Bhattacharya, Sandip Chakraborty, Niloy Ganguly, 2021. "AN END-TO-END SYSTEM FOR OFFLINE LOCALIZED CRISIS MAPPING AND METHOD OF OPERATION THEREOF", Indian Patent, Application No:201931050685, The Patent Office Journal No. 24/2021, Published on June 11, 2021.

Research Collaborations

1. Virginia Tech, Blacksburg, VA, USA

2. University of Kentucky, Lexington, USA

3. Purdue University, West Lafayette, IN 47907, USA

4. Missouri University of Science and Technology, Rolla, USA

5. Indian Institute of Technology Kharagpur, West Bengal, India

6. National Institute of Technology Durgapur, West Bengal, India.

References

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Vijay K. Shah, Ph.D.
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