SUBHRENDU CHATTOPADHYAY

A Contact Information

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• Website: https://subhrendu1987.github.io/

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B Current Position

Assistant Professor (From June 2021) Department of CSE SRM-University, AP Neerukonda, Mangalagiri Mandal

Dist: Guntur

Andhra Pradesh 522240

C Previous Position

Temporary Project Staff

Department of Computer Science and Engineering (October 2020 - March 2021)

Indian Institute of Technology, Kharagpur

Project Name: Development of Algorithms and Tools for Log Analytics and Vulnerability Assessment

Principal Investigator: Dr. Sandip Chakraborty

D Area of Interests

My research interests include Software Defined Networking, Fog Computing, Next Generation Wireless Networks, Distributed Algorithms and Performance Modeling of Network and Communication System.

E Academic Qualification

Post Graduation: Doctor of Philosophy in Computer Science and Engineering from Indian Institute of Technology, Guwahati (July,2014 - April,2021)

Post Graduation: Master of Technology in Computer Science and Engineering with **CGPA: 8.81/10** from Indian Institute of Technology, Guwahati (June, 2012 - July, 2014)

Graduation: Bachelor of Technology in Computer Science and Engineering with CGPA: 8.04/10 from B.P. Poddar Institute of Management and Technology, WestBengal University of Technology (July, 2006 - June, 2010)

Higher Secondary (10+2): with **77.5**% from Beldanga C.R.G.S High School, under West Bengal Council of Higher Secondary Examination (May,2006)

Secondary (10): Madhyamik with 81.5% from Sargachhi Ramakarishna Mission High School, under West Bengal Board of Secondary Education (April, 2003)

F Awards

- 1. Fellowship: Recipient of TCS Research scholarship (Cycle 10) and Fellowship from MHRD
- 2. Travel Grants:
 - (a) Received conference travel grant from IEEE COMSNETS and LRN foundation.
 - (b) Recipient of travel grant from Mirosoft India, Research and Development
- 3. Best paper awards:
 - (a) IEEE INFOCOM 2019 [3] (in a session)
 - (b) IEEE COMSNETS 2016 [9]
 - (c) IEEE ANTS 2013 [15]

G Teaching Assistance

- 1. Teaching Assistant in IIT, Guwahati For Operating Systems (CS341) (2018 Monsoon)
- 2. Teaching Assistant in IIT, Guwahati For Network Lab (CS343) (2016 Monsoon)
- 3. Teaching Assistant in IIT, Guwahati For Wireless Networks (CS551) (2015 Monsoon, 2017 Monsoon)
- 4. **Teaching Assistant** in IIT, Guwahati For Systems Lab (CS558) (2014 Winter, 2015 Winter, 2016 Winter, 2018 Winter)
- 5. Teaching Assistant in IIT, Guwahati For Programming Lab (CS513) (2013 Monsoon, 2014 Monsoon)
- 6. Teaching Assistant in IIT, Guwahati For Computing Laboratory (CS110) (2013 Winter)
- 7. Teaching Assistant in IIT, Guwahati For Discrete Mathematics (CS202) (2012 Monsoon)

H Professional Experience

Automation Test Engineer: Programmer Analyst Trainee in Cognizant Technology Solution India Pvt. Ltd. (July 2010 - July 2011)

Professional Certification: LOMA 280 certified with 99.2%

I Voluntary Services

- 1. Conference Reviewer: IEEE ANTS (2014 2018), IEEE ICC 2017, IEEE NCC 2017, IEEE ISED 2017, IEEE COMSNETS (2018-2019)
- 2. Journal Reviewer: Springer Journal of Network and Systems Management
- 3. Member of Technical Program Committee: IEEE COMSNETS (2020-2021)

J Collaborations

I had the opportunity to collaborate with the following distinguished faculty members.

- 1. Dr. Sandip Chakraborty, Assistant Professor, IIT Kharagpur
- 2. Prof. Soumya K Ghosh, Professor, IIT Kharagpur
- 3. Dr. Samar Shailendra, Scientist, TCS Networks Lab
- 4. Dr. Sushanta Karmakar, Associate Professor, IIT Guwahati
- 5. Dr. Abhinandan S. Prasad, Associate Professor, NIE Mysore
- 6. Dr. Debarati Sen, Associate Professor, IIT Kharagpur
- 7. Dr. Niladri Sett, Assistant Professor, SRM University AP

K Reference Persons

- Prof. Sukumar Nandi, Senior Professor Department of CSE, IIT Guwahati, Assam, India-781039, sukumar@iitg.ac.in, (+91 361 258 2357)
- 2. Dr. Sandip Chakraborty, Assistant Professor Department of CSE, IIT Kharagpur, West Bengal, India-721302, sandipc@cse.iitkgp.ac.in, (+91 322 228 2898)
- 3. Prof. Soumya Kanti Ghosh, Professor Department of CSE, IIT Kharagpur, West Bengal, India-721302, skg@cse.iitkgp.ac.in, (+91 322 228 2332)

List of Publications

- [1] Subhrendu Chattopadhyay, Soumyajit Chatterjee, Sukumar Nandi, and Sandip Chakraborty. Aloe: Fault-tolerant network management and orchestration framework for iot applications. *IEEE Transactions on Network and Service Management*, 17(4):2396–2409, 2020.
- [2] Subhrendu Chattopadhyay, Sukumar Nandi, Sandip Chakraborty, and Abhinandan Prasad. Amalgam: Distributed network control with scalable service chaining. In *Nineteenth IFIP Networking Conference* (*IFIP Networking*), volume 19, pages 519–523, Paris, FR, 22-25June 2020.
- [3] Subhrendu Chattopadhyay, Soumyajit Chatterjee, Sukumar Nandi, and Sandip Chakraborty. Aloe: An elastic auto-scaled and self-stabilized orchestration framework for IoT applications. In *Thirty Eighth IEEE International Conference on Computer Communications (INFOCOM)*, volume 38, Paris, FR, 29 April–2 May 2019.
- [4] Shubha Brata Nath, Subhrendu Chattopadhyay, Raja Karmakar, Sourav Kanti Addya, Sandip Chakraborty, and Soumya K. Ghosh. PTC: Pick-test-choose to place containerized micro-services in iot. In 2019 IEEE Global Communications Conference (GLOBECOM), pages 1–6, Waikoloa, US, 9-13 December 2019.
- [5] Subhrendu Chattopadhyay, Samar Shailendra, Sukumar Nandi, and Sandip Chakraborty. Improving MPTCP performance by enabling sub-flow selection over a SDN supported network. In Fourteenth International Conference on Wireless and Mobile Computing, Networking and Communications (WiMob), volume 14, Limmasol, CY, 15-17 October 2018.
- [6] Subhrendu Chattopadhyay, Sukumar Nandi, Samar Shailendra, and Sandip Chakraborty. Poster: Primary path effect in multi-path TCP: How serious is it for deployment consideration? In Eighteenth ACM International Symposium on Mobile Ad Hoc Networking and Computing (MobiHoc), volume 18, page 36, Chennai, IN, 10-14 July 2017.
- [7] Subhrendu Chattopadhyay, Niladri Sett, Sukumar Nandi, and Sandip Chakraborty. Flipper: Fault-tolerant distributed network management and control. In *Fifteenth IFIP/IEEE International Symposium on Integrated Network Management (IM)*, volume 15, Lisbon, PT, 8-12 May 2017.
- [8] Pranav Kumar Singh, Subhrendu Chattopadhyay, Pradeepkumar Gajendra Bhale, and Sukumar Nandi. Fast and secure handoffs for v2i communication in smart city wi-fi deployement. In *Fourteenth International Conference on Distributed Computing and Internet Technology (ICDCIT)*, volume 14, Bhubaneswar, IN, 13-16 January 2017.
- [9] Sandip Chakraborty and Subhrendu Chattopadhyay. ES2: Managing link level parameters for elevating data rate and stability in high throughput wlan. In *Eighth International Conference on COMmunication System & NETworks (COMSNET 2016)*, volume 8, Bangalore, IN, 5-9 January 2016.
- [10] Sandip Chakraborty, Sukumar Nandi, and Subhrendu Chattopadhyay. Alleviating hidden and exposed nodes in high-throughput wireless mesh networks. *IEEE Transactions on Wireless communications*, 15(2):928–937, 2016.
- [11] Subhrendu Chattopadhyay, Sandip Chakraborty, and Sukumar Nandi. Leveraging the trade-off between spatial reuse and channel contention in wireless mesh networks. In *Eighth International Conference on COMmunication System & NETworks (COMSNET 2016)*, volume 8, Bangalore, IN, 5-9 January 2016.
- [12] Niladri Sett, Subhrendu Chattopadhyay, Sanasam Ranbir Singh, and Sukumar Nandi. A time aware method for predicting dull nodes and links in evolving networks for data cleaning. In Fourteenth IEEE/WIC/ACM International Conference on Web Intelligence (WI), volume 14, pages 304–310, Omaha, US, 13-16 October 2016.

- [13] Sushanta Karmakar and Subhrendu Chattopadhyay. A trigger counting mechanism for ring topology. In *Thirty Seventh Australasian Computer Science Conference-Volume (ACSC 2014)*, volume 37, pages 81–87, Auckland, NZ, January 2014.
- [14] Sandip Chakraborty, Subhrendu Chattopadhyay, Suchetana Chakraborty, and Sukumar Nandi. Defending concealedness in ieee 802.11n. In Sixth IEEE International Conference on COMmunication System & NETworks (COMSNET 2014), volume 6, pages 1–8, Bangalore, IN, 7-10 January 2014.
- [15] Sandip Chakraborty, Sukumar Nandi, and Subhrendu Chattopadhyay. Surpassing flow fairness in a mesh network: How to ensure equity among end users? In Seventh IEEE International Conference on Advanced Networks and Telecommunication Systems (ANTS 2013), volume 7, Chennai, IN, 15-17 December 2013.