

Niloy Saha

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EDUCATION

Indian Institute of Technology, Kharagpur, West Bengal, India

- M.S. in Computer Science and Engineering 2016 – 2019
 - Thesis: QoS-Aware Software-Defined Networks for IoT Applications
 - Advisor: Prof. Sudip Misra
 - Cumulative GPA: 9.51 / 10.00

Institute of Engineering and Management, Kolkata, West Bengal, India

- B.Tech. in Electronics and Communication Engineering 2011 – 2015
 - Cumulative GPA: 9.07 / 10.00

South Point School, Kolkata, West Bengal, India

- Higher Secondary, Science 2009 – 2011
 - Percentage: 86.28%
- Secondary, General 2009
 - Percentage: 86.11%

AREAS OF INTEREST

Software-Defined Networking (SDN), Network Function Virtualization (NFV), Internet of Things (IoT), Wireless Communications.

PUBLICATIONS

JOURNALS

- [1] N. Saha, S. Bera and S. Misra, “Sway: Traffic-Aware QoS Routing in Software-Defined IoT,” *IEEE Transactions on Emerging Topics in Computing*, 2018. DOI: 10.1109/TETC.2018.2847296.
- [2] S. Misra and N. Saha, “Detour: Dynamic Task Offloading in Software-Defined Fog for IoT Applications,” *IEEE Journal on Selected Areas in Communications*, 2019. DOI: 10.1109/JSAC.2019.2906793.
- [3] N. Saha, S. Misra and S. Bera, “Q-Flag: QoS-Aware Flow-rule Aggregation in Software-Defined Networks,” (Under review).
- [4] N. Saha and S. Misra, “QoS-aware Access Point Association in Software-Defined Networks for IoT Applications,” (Under review).

CONFERENCES

- [1] N. Saha, S. Misra and S. Bera, “QoS-Aware Adaptive Flow-rule Aggregation in Software-Defined IoT”, in *Proc. of the IEEE GLOBECOM, Abu Dhabi, UAE*, 2018. DOI: 10.1109/GLOCOM.2018.8647471
- [2] S. Bera, S. Misra, and N. Saha, “DyamiTE: Dynamic Traffic Engineering in Software-Defined Cyber Physical Systems,” in *Proc. of the IEEE ICC Workshop on Communication, Computing, and Networking in Cyber Physical Systems*, Kansas City, Kansas, USA, 2018. DOI: 10.1109/ICCW.2018.8403550.

RESEARCH EXPERIENCE

Indian Institute of Technology, Kharagpur, West Bengal, India

- Junior Research Fellow Jun 2016 – Jun 2017
 - Part of research project titled “Cloud-assisted WBAN-based Ubiquitous Healthcare Management System and its Application in Telemedicine”.
 - Conducted field research in 2 hospitals and helped in development of communication architecture.
 - Conducted experimental verification and clinical trials.
- MS Research Scholar Jul 2016 – Dec 2018
 - Investigated how a software-defined architecture can help in addressing the challenges in IoT, such as quality of service and traffic-engineering.
 - Conducted experimental evaluations using POX and ONOS SDN controllers, and Mininet network emulator.

PROFESSIONAL AFFILIATIONS & ACTIVITIES	Institute of Electrical and Electronics Engineers (IEEE)	
	<ul style="list-style-type: none"> ▪ Graduate Student Member ▪ Student Activity Committee, IIT Kharagpur Student Branch ▪ Treasurer, IIT Kharagpur Student Branch 	2016 – Present 2017 – 2018 2019 – Present
	Reviewer , Peer-Review Journals	
	<ul style="list-style-type: none"> ▪ IEEE Transactions on Mobile Computing ▪ IEEE Journal on Selected Areas in Communications ▪ IEEE Transactions on Vehicular Technology ▪ IEEE Systems Journal ▪ International Journal of Communication Systems (Wiley) 	
TEACHING EXPERIENCE	Teaching Assistant , IIT Kharagpur <ul style="list-style-type: none"> ▪ Teaching assistant for Programming and Data Structures Lab (CS19001) ▪ Instructed undergraduate students by leading discussions, fielding questions, and grading lab assignments. 	2016 – 2018
SKILLS	\LaTeX , MATLAB, NS-3, Mininet, POX/ONOS SDN Controllers, Microsoft Office, Microsoft Visio, C++, Java, Python.	
LANGUAGES	<ul style="list-style-type: none"> ▪ Bengali: Native language. ▪ English: Fluent (speaking, reading, writing). 	
INTERESTS	Photography, reading, badminton.	

Last updated: 2019-11-18