5th International Conference on
Networking, Systems and Security (5th NSysS 2018)

Advance Program

Day 1: December 18, 2018, Tuesday	
8:00 am – 9:00 am	Registration Venue: Graduate Complex, 5th floor, ECE Building, West Palashi Campus, BUET, Dhaka, Bangladesh
9:00 am – 9:15 am	Inauguration
9:15 am – 10:15 am	**Keynote Talk: "Teaching, Learning and Mentoring Computational Thinking Online in Bangladesh for Younger Students and In-Service Professionals"** *Hasan M. Jamil, University of Idaho, USA* Session Chair: Muhammad Masroor Ali
10:15 am – 10:30 am	Tea Break
10:30 am – 11:30 am	Technical Session: "Networking"
	Session Chair: Sadia Sharmin
	Gazi Zahirul Islam and Mohammod Abul Kashem. "An OFDMA-based New MAC Mechanism for IEEE 802.11ax"
	Masud Rana, M. Kaykobad and A. B. M. Alim Al Islam. "A New Approach for Selecting Aggregated Multicast Trees to Reduce Forwarding States"
	Tasmiah Tamzid Anannya and Ashikur Rahman. "Extended Neighborhood Knowledge based Dominant Pruning (ExDP)"
11:30 am – 12:15 pm	Industry Talk: "Exploitation of Information Propagation Patterns in Social Sensing" *Tanvir Amin, Google, USA* Session Chair: Muhammad Abdullah Adnan
12:15 pm – 1:00 pm	Invited Talk: "Data driven decision making in healthcare" *Md Munirul Haque, Purdue University, USA* Session Chair: Md. Shamsuzzoha Bayzid
1:00 pm – 2:20 pm	Prayer Break, Lunch
2:20 pm – 3:20 pm	Tutorial: "Tutorial on wireless sensor networks" *Nadia Al-Aboody, Southern Technical University, Amara Technical Institute, Iraq* Session Chair: Md. Shohrab Hossain
3:20 pm – 4:00 pm	Technical Session: "Mobile Computing"
	Session Chair: Salekul Islam, UIU
	Md. Mobasshir Arshed Naved and Md. Yusuf Sarwar Uddin. "Adaptive

	Notifications Generation for Smartphone Users Based on their Physical Activities"
	Nafis Sadeq, Fazle Rabbi Rahat, Ashikur Rahman, Sheikh Iqbal Ahamed and Kamrul Hasan. "Smartphone-based Calorie Estimation From Food Image Using Distance Information"
4:00 pm – 4:30 pm	Tea Break, Prayer, Networking
4:30 pm – 5:30 pm	Students' Forum Session Chair: Mahmuda Naznin
	"Tree2Tree Neural Translation Model for Learning Source Code Changes" Saikat Chakraborty, University of Virginia, Charlottesville, VA, USA.
	"Addressing Massachusetts's Opioid Crisis: An integrated approach of Data Mining and Machine Learning" Md Mahmudul Hasan, PhD candidate, Department of Mechanical and Industrial Engineering, Northeastern University
	Industry demonstration for students by *Signal Stream Inc, Canada* Title: "Firmware development" Demonstration by: Parvez Mahmood and Mohsinul Bari Shakir
4:30 pm – 5:30 pm In parallel	Poster Presentations of Short Papers Session Chair: Md. Monirul Islam *Venue: Lobby, Graduate Complex, 5th Floor, CSE Wing, ECE Building, West Palashi, BUET, Dhaka, Bangladesh.*
5:30 pm – 6:00 pm	Business Meeting Session Chair: M. Sohel Rahman
Day 2: December 19, 2018, Wednesday	
8:00 am – 9:00 am	Registration Venue: Graduate Complex, 5th floor, ECE Building, West Palashi Campus, BUET, Dhaka, Bangladesh
9:00 am – 10:00 am	**Keynote Talk: "Automated Program Repair"** *(An ACM Distinguished Speaker Lecture, as part of Khan-Bose Lecture Series of BUET ACM Chapter)* *Abhik Roychoudhury, School of Computing, NUS, Singapore* Session Chair: M. Sohel Rahman
10:00 am – 10:40 am	Technical Session: "Security - I"
	Session Chair: Kazi Md. Rokibul Alam, KUET
	Shanto Roy, Md. Ashaduzzaman, Mehedi Hassan and Arnab Rahman Chowdhury. "BlockChain for IoT Security and Management: Current Prospects, Challenges and Future Directions"
	Mazharul Islam, Md.Nazmuddoha Ansary, Novia Nurain, Salahuddin Parvez Shams and A. B. M. Alim Al Islam. "A Sweet Recipe for Consolidated Vulnerabilities : Attacking a Live Website by Harnessing a

	Killer Combination of Vulnerabilities for Greater Harm"
10:40 am – 11:00 am	Tea Break
11:00 am - 12:00 pm	Technical Session: "Networking"
	Session Chair: Mahmuda Naznin
	Laboni Sarker, Sakshar Chakravarty and Ashikur Rahman. "A Graph Theoretic Approach for Maximizing Target Coverage using Minimum Directional Sensors in Randomly Deployed Wireless Sensor Networks"
	Sirat Samyoun, Ashikur Rahman and Raqeebir Rab. "Design and Analysis of a Fault-Tolerant Topology Control Algorithm for Wireless Multi-hop Networks"
	A S M Rizvi, Tarik Reza Toha, Siddhartha Shankar Das, Sriram Chellappan and A. B. M. Alim Al Islam. "Exploiting a Synergy between Greedy Approach and NSGA for Scheduling in Computing Clusters"
12:00 pm – 1:00 pm	Invited Talk: "Big Data to Machine Intelligence" *Farhana H. Zulkernine, Queen's University, Canada* Session Chair: Abu Wasif
1:00 pm – 2:20 pm	Prayer Break, Lunch
2:20 pm – 3:20 pm	**Keynote Talk: "Securing Cyber-Physical and IoT Systems in Smart Living Environments"** *Sajal K. Das, Missouri University of Science and Technology, USA* Session Chair: A.K.M. Ashikur Rahman
3:20 pm – 4:00 pm	Technical Session: "Security - II"
	Session Chair: Anindya Iqbal
	Md Taksir Hasan Majumder and A. B. M. Alim Al Islam. "A Tale of a Deep Learning Approach to Image Forgery Detection"
	Nur Imtizul Haque, Kazi Md. Rokibul Alam, Tasfia Mashiat and Yasuhiko Morimoto. "A Technique to Enrich the Secrecy Level of High Capacity Data Hiding Steganography Technique in JPEG Compressed Image"
4:00 pm – 4:30 pm	Tea Break, Prayer, Networking
4:30 pm – 5:30 pm	Students' Posters Session Session Chair: Madhusudan Basak *Venue: Lobby, Graduate Complex, 5th Floor, CSE Wing, ECE Building, West Palashi, BUET, Dhaka, Bangladesh.*
5:30 pm – 6:00 pm	Industry Session Talks from the valued Financial Co-sponsors Session Chair: Anindya Iqbal
6:00 pm – 7:00 pm	Security Panel Session Chair: Md. Mostofa Akbar
7:00 pm – 9:00 pm	Conference Banquette
Day 3: December 20, 2018, Thursday	
8:00 am – 9:00 am	Registration

	Venue: Graduate Complex, 5th floor, ECE Building, West Palashi Campus, BUET, Dhaka, Bangladesh
9:00 am – 10:15 am	**Keynote Talk: "Wireless for the Internet of Things: Past, Present, and Future"** *Yuan He, Tsinghua University, China* Session Chair: Mohammed Eunus Ali
10:15 am – 10:40 am	Tea Break
10:40 am – 11:40 am	Technical Session: "Systems"
	Session Chair: Tanzima Hashem
	Samiul Ali Sarker, Masudur Rahman, Nasif Muslim and Salekul Islam. "Performance Analysis of Video Streaming at the Edge and Core Cloud"
	Md. Saidul Hoque Anik, Md. Adnanul Islam and A. B. M. Alim Al Islam. "An Approach Towards Multilingual Translation By Semantic-Based Verb Identification And Root Word Analysis"
	Zaheen Mustakin, Saad Manzur, Tanzila Choudhury, Farzana Rahman, Sriram Chellappan and A. B. M. Alim Al Islam. "Super-savior: An Independent Open Platform Wearable for Generating Emergency Alarms"
11:40 am – 12:40 pm	Invited Talk: "Upskilling the future workforce through Affective training" *M. Ehsan Hoque, University of Rochester, USA* Session Chair: Mohammad Saifur Rahman
12:40 am – 2:00 pm	Prayer Break, Lunch
2:00 pm – 7:00 pm	Conference Tour

Venue of all events *(if not mentioned otherwise):*

Graduate Seminar Room, Graduate Complex, 5th floor, ECE Building, West Palashi, Dhaka, Bangladesh