



IEMTRONICS

International Conference



IEEE IEMTRONICS 2021

Virtual Conference

International IOT, Electronics and Mechatronics Conference 2021
Toronto, Canada
21st -24th April, 2021

**All the timings are given in Eastern Daylight Time (EDT)*

TECHNICAL SCHEDULE : CONTENT

	EVENT DETAILS	TIMING*	
DAY 1 (21st April, 2021)	INAUGURATION	8:00 A.M-8:45 A.M	
	KEYNOTE1 (Prof. Mark Arthur Reed, Professor, Department of Electrical Engineering, Yale University, USA)	8:45 A.M – 9:30 A.M	
	KEYNOTE2 (Prof. Sanjay Lall, Professor, Department of Electrical Engineering, Stanford University, USA)	9:30 A.M – 10:15 A.M	
	Parallel Sessions 1:	SESSION 1	10:30 A.M- 12:15 P.M
		SESSION 2	10:30 A.M- 12:30 P.M
		SESSION 3	10:30 A.M- 12:00 P.M
	Parallel Sessions 2:	SESSION 4	12:45 P.M- 2:45 P.M
		SESSION 5	12:45 P.M- 2:45 P.M
		SESSION 6	12:45 P.M- 2:45 P.M
DAY 2 (22nd April, 2021)	KEYNOTE3 (Prof. Fakhri Karray, Professor, Department of Electrical and Computer Engineering, University of Waterloo, Canada)	9:30 A.M – 10:15 A.M	
	KEYNOTE4 (Steven J. Davis, Founder, Golem Labs, USA)	10:15 A.M – 11:00 A.M	
	Parallel Sessions 1:	SESSION 7	11:15 A.M- 01:15 P.M
		SESSION 8	11:15 A.M- 01:15 P.M
		SESSION 9	11:15 A.M- 12:45 P.M
	Parallel Sessions 2:	SESSION 10	1:30 P.M- 3:30 P.M
		SESSION 11	1:30 P.M- 3:30 P.M
		SESSION 12	1:30 P.M- 3:30 P.M

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TECHNICAL SCHEDULE : CONTENT (contd..)

	EVENT DETAILS	TIMING*	
DAY 3 (23rd April, 2021)	KEYNOTE5 (Prof. Raafat R. Mansour, Professor, Canada Research Chair, Electrical and Computer Engineering Department, University of Waterloo, Canada)	8:45 A.M – 9:30 A.M	
	KEYNOTE 6 (Prof. David Campbell, Professor, Department of Electrical and Computer Engineering, Boston University, USA)	9:30 A.M – 10:15 A.M	
	KEYNOTE 7 (Prof. Krishna Saraswat, Rickey/Nielsen Chair Professor, Stanford University, USA)	10:15 A.M-11:00 A.M	
	Parallel Sessions 1:	SESSION 13	11:15 A.M- 01:15 P.M
		SESSION 14	11:15 A.M- 01:00 P.M
		SESSION 15	11:15 A.M- 01:00 P.M
	Parallel Sessions 2:	SESSION 16	1:30 P.M- 3:30 P.M
		SESSION 17	1:30 P.M- 3:30 P.M
		SESSION 18	1:30 P.M- 3:30 P.M
DAY 4 (24th April, 2021)	KEYNOTE8 (Dr. Bonita Bhaskaran, Principal Engineer, NVIDIA, USA)	8:45 A.M – 9:30 A.M	
	KEYNOTE9 (Prof. Sean Follmer, Department of Mechanical Engineering and Computer Science, Stanford University, USA)	9:30 A.M – 10:15 A.M	
	KEYNOTE10 (Prof. Nicholas Bambos, Professor, Department of Electrical Engineering and Management Science, Stanford University, USA)	10:15 A.M-11:00 A.M	
	Parallel Sessions 1:	SESSION 19	11:15 A.M- 01:15 P.M
		SESSION 20	11:15 A.M- 01:15 P.M
		SESSION 21	11:15 A.M- 01:15 P.M
	Parallel Sessions 2:	SESSION 22	1:30 P.M- 3:30 P.M
		SESSION 23	1:30 P.M- 3:30 P.M
		SESSION 24	1:30 P.M- 3:30 P.M
Valedictory Session		3:45 P.M- 4:15 P.M	

DAY 1: 21st April, 2021

TIME	NAME OF THE EVENT	PARTICIPATION LINK
8:00 A.M-8:45 A.M	INAUGURATION	
8:45 A.M – 9:30 A.M	KEYNOTE1(Prof. Mark Arthur Reed, Professor, Department of Electrical Engineering, Yale University, USA)	
9:30 A.M – 10:15 A.M	KEYNOTE2(Prof. Sanjay Lall, Professor, Department of Electrical Engineering, Stanford University, USA) Title: "Design of Decentralized Control Systems"	

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PARALLEL SESSIONS : 1

SESSION 1 : Electronics & Mechatronics

SESSION CHAIR: Dr. Shahab Tayeb (California State University, Fresno, USA) (Rapporteur:Prof. Samit Karmakar , Prof. Soumik Kundu)

SESSION TIME: 10:30 A.M- 12:15 P.M

PARTICIPATION LINK:

TIME ALLOTTED	PAPER ID	PAPER NAME	AUTHORS WITH AFFILIATION & COUNTRY
10:30 AM-10:45 AM	1570708476	Evaluation and Mitigation of Crosstalk Effects in Silicon Bolometers Arrays	Mario E. B. G. N. Silva and Leandro Manera (University of Campinas, Brazil)
10:45 AM-11:00 AM	1570709309	Detection of Oil Spill Pollution in Seawater Using Drones: Simulation & Lab-Based Experimental Study	Ashraf Saleem, Ahmed Al Maashri and Omer Eldirdiry (Sultan Qaboos University, Oman); Jawhar Ghommam (Ecole de Technologie Superieure, Canada); Hadj Bourdoucen and Ghazi Al Rawas (Sultan Qaboos University, Oman); Ahmed Ammari (INSAT - Carthage University Tunisia, Tunisia)
11:00 AM-11:15 AM	1570709356	IoT-Based Synergistic Approach for Poultry Management System	Moses O. Onibonoje (Afe Babalola University, Ado Ekiti, Nigeria)
11:15 AM-11:30 AM	1570709377	An Approach to Design Human Assisting Prototype Robot for Providing Fast and Hygienically Secure Environment to Clinical Professionals in Order to Fight Against COVID19 in Hospitals	Kamran Hameed (Imam AbdulRahman Bin Faisal UNiversity, Saudi Arabia)
11:30 AM-11:45 AM	1570709400	An IoT Design Approach to Residential Energy Metering, Billing and Protection	Moses O. Onibonoje (Afe Babalola University, Ado Ekiti, Nigeria)
11:45 AM-12:00 PM	1570709807	Testbed for a Three Dimensional Pico-Sphere Satellite-Simulator(T3Dpilare)	Muhamamd Faisal (Aerospace Information Technology, University of Wuerzburg, Germany)
12:00 PM-12:15 PM	1570711034	Smart Cooling System for Milk Transportation in Rural Areas	Tankiso Komako and Ashleigh Townsend (North-West University, Potchefstroom, South Africa); Immanuel N Jiya (University of Agder, Norway); Rupert Gouws (North-West University, Potchefstroom, South Africa)

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PARALLEL SESSIONS : 1

SESSION 2 : Electronics & Mechatronics

SESSION CHAIR: Dr. Ritesh Ajoodha (The University of the Witwatersrand, Johannesburg, South Africa) (Rapporteur: Prof. Arunava Mukhopadhyay, Prof. Dr. Senjuti Khara)

SESSION TIME: 10:30 A.M- 12:30 P.M

PARTICIPATION LINK:

TIME ALLOTTED	PAPER ID	PAPER NAME	AUTHORS WITH AFFILIATION & COUNTRY
10:30 AM-10:45 AM	1570711730	Industrial Heating Furnace Temperature Control System Design Through Fuzzy-PID Controller	Bharath Kumar V. ; Sandeep Rao; Godavarthi Charan Y. V. Pavan Kumar (Vellore Institute of Technology - Andhra Pradesh (VIT-AP) University, India)
10:45 AM-11:00 AM	1570709453	Mechatronic Exoskeleton Systems for Supporting the Biomechanics of Shoulder-Elbow-Wrist: An Innovative Review	José Cornejo (Bioastronautics and Space Mechatronics Research Group, Peru); Deyby Huamanchahua (Facultad de Ingeniería, Universidad ESAN, Peru); Sofía Huamán-Vizconde (Facultad de Ingeniería, Universidad Tecnológica del Perú, Peru); Dana Terrazas-Rodas (Universidad Tecnológica del Perú, Peru); Jorge Sierra-Huertas and Alexander Janampa-Espinoza (Facultad de Ingeniería, Universidad Tecnológica del Perú, Peru); Jorge Gonzáles (Facultad de Ingeniería, Universidad Tecnológica del Perú, Peru); Manuel Cardona (Facultad de Ingeniería, Universidad Don Bosco, El Salvador)
11:00 AM-11:15 AM	1570711425	Steer-By-Wire Control System Based on Carsim and Simulink	Haiyuan Wei (Wuhan University of Technology)
11:15 AM-11:30 AM	1570710169	Topology Optimization of KUKA KR16 Industrial Robot Using Equivalent Static Load Method	Lakshmi Srinivas G (Birla Institute of Technology and Science & BITS Pilani Hyderabad Campus, India); Arshad Javed (BITS Pilani, Hyderabad Campus, India)
11:30 AM-11:45 AM	1570704868	Dynamic Analysis of Quadcopter with Novel Controller	Manas Kumar Sahoo and Jayanta Dutt (IIT Delhi, India); Subir Saha (Indian Institute of Technology Delhi, India)
11:45 AM-12:00 PM	1570709449	An Empirical Study of Machine Learning Algorithms for Social Media Bot Detection	Maryam Heidari (George Mason University, USA)
12:00 PM-12:15 PM	1570708354	Dynamic Modeling and Feedback Linearization Control of a 3-D Overhead Gantry Crane System	Amin A. M. Fadlalla; Mohamed Hassan. (King Fahd University of Petroleum & Minerals, Saudi Arabia)
12:15 PM-12:30 PM	1570708969	Biomechatronic Embedded System Design of Sensorized Glove with Soft Robotic Hand Exoskeleton Used for Rover Rescue Missions on Mars	Paul Palacios and José Cornejo; Milton V. José Luis Napán and Walter Castillo Victor Ticllacuri ; Andrés D. Reina (Bioastronautics and Space Mechatronics Research Group, Colombia); Adolfo Chaves-Jiménez (Instituto Tecnológico de Costa Rica, Costa Rica); Gustavo Jamanca-Lino (Colorado School of Mines, USA); Juan C Chavez (HUB Designers & Talent360, USA)

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PARALLEL SESSIONS : 1

SESSION 3 : Electronics & Mechatronics

SESSION CHAIR: Dr. Ashwini Jadhav (University of the Witwatersrand) (Rapporteur: Prof. Sayantani Choudhuri , Prof. Saibal Ghosh)

SESSION TIME: 10:30 A.M- 12:00 P.M

PARTICIPATION LINK:

TIME ALLOTTED	PAPER ID	PAPER NAME	AUTHORS WITH AFFILIATION & COUNTRY
10:30 AM-10:45 AM	1570709330	Torque Control Using Metaheuristic Optimization for Optimal Energy Consumption of a BLDCM	Rania Majdoubi (Mohammed V University in Rabat, Morocco)
10:45 AM-11:00 AM	1570711241	Energy Performance Analysis of a Differential Wheeled Mobile Robot with Fuzzy Logic Controller	Said Fadlo (Ecole Nationale Supérieure d'Arts et Métiers & University Hassan II, Morocco); Hafid Ait el mahjoub (ENSAM, Morocco); Nabila Rabbah (Hassan II University, Morocco)
11:00 AM-11:15 AM	1570709446	Ontology Creation Based on Attention Mechanism for a Specific Business Domain	Maryam Heidari (George Mason University, USA); Samira Zad (Florida International University, USA)
11:15 AM-11:30 AM	1570709338	Design of Piezoelectric Energy Harvesting Shoes for Charging Phones	Shahriar Khan (Independent University, Bangladesh); Muhit Sarneabat (Institute of Engineers, Bangladesh)
11:30 AM-11:45 AM	1570708912	Limitations of Loop Gain in Motion Models of Physical Systems	Tri Minh Tran (Gunma University & Japan, Japan); Yasunori Kobori, Anna Kuwana and Haruo Kobayashi (Gunma University, Japan)
11:45 AM-12:00 PM	1570708793	Implementation of a Low-Cost Automatic Bacilloscopy System for the Diagnosis of Tuberculosis	Joaquin Gonzalez, Miguel Cataño and Willy Carrera (Pontificia Universidad Catolica del Peru, Peru)

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PARALLEL SESSIONS : 2

SESSION 4 : Electronics

SESSION CHAIR: Dr. Kanika Sood (California State University, Fullerton, USA) (Rapporteur:Prof. Bavrabi Ghosh , Prof. Gourab Panda)

SESSION TIME: 12:45 P.M- 2:45 P.M

PARTICIPATION LINK:

TIME ALLOTTED	PAPER ID	PAPER NAME	AUTHORS WITH AFFILIATION & COUNTRY
12:45 PM -1:00PM	1570708974	Hybrid Energy Storage for Underground Mining EV	Ashleigh Townsend (North-West University, Potchefstroom, South Africa); Immanuel N Jiya (University of Agder, Norway); Rupert Gouws (North-West University, Potchefstroom, South Africa)
1:00 PM-1:15 PM	1570709945	A New Beatstream-Based Control of Regenerative Variable Speed Drive	Anil Padmanabhan (Birla Institute of Technology and Science, Pilani, Dubai Campus, United Arab Emirates); Vilas H Gaidhane (Birla Institute of Technology and Science Pilani, Dubai Campus, India)
1:15 PM-1:30 PM	1570714844	Efficient Acetone Sensing by Pd Nanoparticle Loaded Graphene Field Effect Transistor	Arnab Hazra (Birla Institute of Technology and Science-Pilani, Pilani Campus, Rajasthan, India); Radha Bhardwaj (BITS, Pilani, India)
1:30 PM-1:45 PM	1570711279	A Radiation-Hardened Wide Spectral Response 4T CMOS Image Sensor Pixel Employing a Through-Silicon via Based Photodetector	Abdollah Pil Ali (University of Waterloo, Canada); Razieh Khalili (University of Guilan, Iran); Seyed Mohammad Reza Safaee (McGill University, Canada); Mohammad Azim Karami (Iran University of Science and Technology, Iran)
1:45 PM-2:00 PM	1570707776	Assessment of Electromagnetic Energy Absorption Rate in Hibiscus Flower Model at 947.50 MHz and 1842.50 MHz	Nibedita Mukherjee (Budge Budge Institute of Technology, India); Ardhendu Kundu and Bhaskar Gupta (Jadavpur University, India); Monojit Mitra (IIST, India)
2:00 PM-2:15 PM	1570710993	Practical Limits and Challenges for Powering of Wireless Systems in Implantable and Lab on a Chip Biomedical Devices and Review of the Low Power Design Techniques	Bahram Ghafari (The University of Melbourne, Australia)
2:15 PM-2:30 PM	1570711729	Error Performance Index Based PID Tuning Methods for Temperature Control of Heat Exchanger System	Bharath Kumar V., Sampath Dasa and Siva Praneeth Vn (VIT-AP University, India); Y. V. Pavan Kumar (Vellore Institute of Technology - Andhra Pradesh (VIT-AP) University, India)
2:30 PM -2:45 PM	1570709285	Heterogenous Breast Phantom with Carcinoma for Ionizing Machines	Budour Ali AlFares (Imam Abdulrahman Bin Faisal University, Saudi Arabia); AlJohara Ahmed AlJabr (University of Imam Abdulrahman bin Faisal, Saudi Arabia); Maryam Mohammed Zainalabedin, Munthreen Muneer AlMuzain and Gameel Saleh (Imam Abdulrahman Bin Faisal University, Saudi Arabia); Maryam AlHashim (King Fahd Specialist Hospital in Dammam, Saudi Arabia)

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PARALLEL SESSIONS : 2

SESSION 5 : Electronics

SESSION CHAIR:Dr. Ashiq Sakib (Florida Polytechnic University) (Rapporteur:Prof. Sudhir Chandra Murmu , Prof. Amit Das)

SESSION TIME: 12:45 P.M- 2:45 P.M

PARTICIPATION LINK:

TIME ALLOTTED	PAPER ID	PAPER NAME	AUTHORS WITH AFFILIATION & COUNTRY
12:45 PM -1:00PM	1570711636	Design of a Half-Wave Dipole Antenna for Wi-Fi & WLAN System Using ISM Band	Rashedul Islam, Fardeen Mahbub, Shouherdho Banerjee Akash and Sayed Abdul Kadir Al-Nahiun (American International University-Bangladesh, Bangladesh)
1:00 PM-1:15 PM	1570711572	Smart Food Service System for Future Restaurant Using Overhead Crane	Farhadul Islam (Chittagong University Of Engineering & Technoloy, Bangladesh); Kazi Alam and Askar Nayan (IIUC, Bangladesh); Sk. Md. Golam Mostafa (International Islamic University Chittagong, Bangladesh)
1:15 PM-1:30 PM	1570707586	Dual Tuned Switch for Dual Resonance 1H/13C MRI Coil	Gameel Saleh (Imam Abdulrahman Bin Faisal University, Saudi Arabia); Ashraf Abuelhajja (Applied Science Private University, Jordan)
1:30 PM-1:45 PM	1570709186	Design of Operational Amplifier Using Artificial Neural Network	Ganta Yogesh (Birla Institute of Technology and Science, Pilani, Dubai Campus, United Arab Emirates); Vilas H Gaidhane (Birla Institute of Technology and Science Pilani, Dubai Campus, India)
1:45 PM-2:00 PM	1570710474	Defense in Depth Approach on AES Cryptographic Decryption Core to Enhance Reliability	Gayatri Yendamury (Robert Bosch Engineering and Business Solutions Private Limited, India); Mohankumar N (Amrita School of Engineering Coimbatore & Amrita Vishwa Vidyapeetham, India)
2:00 PM-2:15 PM	1570709219	Constant Tera-Ohm Pseudo-Resistor over Wide Dynamic Range	Israa Y. I. AbuShawish and Soliman Mahmoud (University of Sharjah, United Arab Emirates)
2:15 PM-2:30 PM	1570705026	Evaluation of Moth-Flame Optimization, Genetic and Simulated Annealing Tuned PID Controller for Steering Control of Autonomous Underwater Vehicle	Sudarshan Kumar Babu Valluru, Karan Sehgal and Hitesh Thareja (Delhi Technological University, India)
2:30 PM -2:45 PM	1570705311	Virtex 7 FPGA Implementation of 256 Bit Key AES Algorithm with Key Schedule and Sub Bytes Block Optimization	Mahendrakumar Kunasekaran (Xilinx Semiconductor, India); Kumar Rahul (XILINX, India); Santosh Yachareni (Xilinx Semiconductor, India)

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PARALLEL SESSIONS : 2

SESSION 6 : Electronics

SESSION CHAIR: Dr. Shahriar Khan (Independent University, Bangladesh) (Rapporteur:Prof. Rajat Subhra Pal ,Prof. Neeta Sahay)

SESSION TIME: 12:45 P.M- 2:45 P.M

PARTICIPATION LINK:

TIME ALLOTTED	PAPER ID	PAPER NAME	AUTHORS WITH AFFILIATION & COUNTRY
12:45 PM -1:00PM	1570713901	Demand Analysis of Energy Consumption in a Residential Apartment Using Machine Learning	Halima Haque, Adrish Kumar Chowdhury, Md. Nasfikur R. Khan and Md. Abdur Razzak (Independent University, Bangladesh)
1:00 PM-1:15 PM	1570709183	Stability Analysis of Two-Stage OTA with Frequency Compensation	Misari Shah (Birla Institute of Technology and Science, Pilani, Dubai Campus, United Arab Emirates); Vilas H Gaidhane (Birla Institute of Technology and Science Pilani, Dubai Campus, India); Chippy Prasannan (Birla Institute of Technology and Science Pilani, Dubai Campus, United Arab Emirates)
1:15 PM-1:30 PM	1570709495	Process Monitoring Vehicle for SRAM Critical Path Using Ring Oscillator in 7 nm Finfet	Mohammad Anees (Xilinx, India); Kumar Rahul (XILINX, India); Sourabh Aditya Swarnkar (Xilinx, India); Santosh Yachareni (Xilinx Semiconductor, India)
1:30 PM-1:45 PM	1570709313	Tracking Control of Vertical Tail Damaged Aircraft with Dissimilar Actuator Configuration	Muhammad Ammar Ashraf (University of Science and Technology Beijing, China); Salman Ijaz (University of Nottingham, China); Yao Zou (University of Science and Technology Beijing, China); Hamdoon Ijaz (Beijing University of Aeronautics and Astronautics, China)
1:45 PM-2:00 PM	1570713597	A Study and Optimization of Different Probe Positions for Different Feeding Techniques Using Particle Swarm Optimization	Sutapa Ray (IEM, India); Soham Kanti Bishnu and Agniva Chatterjee (Institute of Engineering and Management, India)
2:00 PM-2:15 PM	1570708134	Metal Oxide Surge Arrester: A Tool for Lightning Stroke Analysis	Muhammad Shaban (Loughborough University, United Kingdom (Great Britain))
2:15 PM-2:30 PM	1570707851	Extended Three-Stage Recursive Least Squares Identification Algorithm for Multiple Input Single Output CARARMA Systems	Munya Arwin and Nasar Aldian Shashoa (The Libyan Academy, Libya)
2:30 PM -2:45 PM	1570703574	An Ultra Low Power MoS2 TFET-Based PLL Design for IoT Application	Naheem Adesina (Louisiana State University, USA)

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DAY 2: 22nd April, 2021

TIME	NAME OF THE EVENT	PARTICIPATION LINK
9:30 A.M – 10:15 A.M	KEYNOTE3 (Prof. Fakhri Karray, Professor, Department of Electrical and Computer Engineering, University of Waterloo, Canada)	
10:15 A.M – 11:00 A.M	KEYNOTE4 (Steven J. Davis, Founder, Golem Labs, USA) Title: “ A Brief History of Technology “	

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PARALLEL SESSIONS : 1

SESSION 7 : Electronics			
SESSION CHAIR: Dr. Md. Abdur Razzak (Independent University, Bangladesh) (Rapporteur:Prof. Shubhasri Roy ,Prof. Dr. Sanjoy Mondal)			
SESSION TIME: 11:15 A.M- 01:15 P.M			
PARTICIPATION LINK:			
TIME ALLOTTED	PAPER ID	PAPER NAME	AUTHORS WITH AFFILIATION & COUNTRY
11:15 A.M- 11:30 P.M	1570707455	Phase Noise and Jitter Measurements in SEU-Hardened PLL Design	Naheem Adesina (Louisiana State University, USA)
11:30 P.M - 11:45 PM	1570711028	Dips Detection Techniques Discussion	Noureddine Brakta and Omar Bendjeghaba (University of M'hamed Bougarra, Boumerdes, Algeria); Mohamed Yazid Zidani (Faculty of Technology University of Mostefa Ben Boulaïd Batna, Algeria)
11:45 PM - 12:00 PM	1570709401	Wireless Versus Wired Network-On-Chip to Enable the Multi-Tenant Multi-FPGAs in Cloud	Qaiser Ijaz (The Islamia University of Bahawalpur, Pakistan); El-Bey Bourenane (Universite de Bourgogne, France)
12:00 PM -12:15 PM	1570703003	Design of an Accurate, Cost-Effective Radix-4 Booth Multiplier	Riya Agarwal, Sanjana Jayakrishna and Sivaselvan N (Manipal Institute of Technology, India)
12:15 PM -12:30 PM	1570708674	Improved Flower Pollination Algorithm Based Optimal Placement and Sizing of DG for Practical Indian 52 Bus System	S Dhivya (VIT University, India); Arul Rajagopalan (Anna University, India)
12:30 PM -12:45 PM	1570709344	High Gain Hybrid DC-DC Converter with 3-Phase Inverter System for Electric Auto Rickshaw	Abdullah Mamun (Independent University Bangladesh, Bangladesh); Shahriar Khan (Independent University, Bangladesh)
12:45 PM - 1:00 PM	1570713385	Derivative Based Kalman Filter and Its Implementation on Tuning PI Controller for the Van De Vusse Reactor	Atanu Panda (IEM, India); Parijat Bhowmick (University of Manchester, United Kingdom (Great Britain)); Soham Kanti Bishnu (Institute of Engineering and Management, India); Sanjay Bhadra (UEM, India); Arijit Ganguly (University of Engineering & Management, India)
1:00 PM -1:15 PM	1570708407	IR Aware Cell Placement and Clock Tree Performance Optimization in FPGA Memories	Sourabh Aditya Swarnkar and Mohammad Anees (Xilinx, India); Kumar Rahul (XILINX, India); Santosh Yachareni (Xilinx Semiconductor, India)

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PARALLEL SESSIONS : 1

SESSION 8 : Electronics

SESSION CHAIR: Dr. Doina Bein (California State University, Fullerton, USA) (Rapporteur: Prof. Bavrabi Ghosh, Prof. Gourab Panda)

SESSION TIME: 11:15 A.M- 01:15 P.M

PARTICIPATION LINK:

TIME ALLOTTED	PAPER ID	PAPER NAME	AUTHORS WITH AFFILIATION & COUNTRY
11:15 A.M- 11:30 P.M	1570710624	The Effects of Electrode Physical Parameters on the Statistical Life Models of Li-Ion Battery	Talal Mouais and Omar Kittaneh (Effat University, Saudi Arabia); Mohammed Abdul Majid (Effat University, An Nazlah Al Yamaniyyah, Saudi Arabia)
11:30 P.M - 11:45 PM	1570713897	A Buck Converter-Based Battery Charging Controller for Electric Vehicles Using Modified PI Control System	Md. Rezanul Haque and Md. Abdur Razzak (Independent University, Bangladesh)
11:45 PM - 12:00 PM	1570713389	An Optimal Type-1 Servo Control Mechanism for Flight-Path-Rate-Demand Lateral Missile Autopilot	Parijat Bhowmick (University of Manchester, United Kingdom (Great Britain)); Atanu Panda (IEM, India); Arijit Ganguly (University of Engineering & Management, India); Sanjay Bhadra (UEM, India); Soham Kanti Bishnu (Institute of Engineering and Management, India)
12:00 PM -12:15 PM	1570709574	Current-Mode Self-Sensing Temperature Sensor Using DC-CCII for Optoelectronic Devices	Shahzad Mohammad Ghasemi and Soliman Mahmoud (University of Sharjah, United Arab Emirates)
12:15 PM -12:30 PM	1570706963	Galois Field Arithmetic Operations Using Xilinx FPGAs in Cryptography	Hari Krishna Balupala (Xilinx India, India); Kumar Rahul (XILINX, India); Santosh Yachareni (Xilinx Semiconductor, India)
12:30 PM -12:45 PM	1570708803	The Modified Proportional Integral Controller for the BLDC Motor	Md. Rezanul Haque and Shahriar Khan (Independent University, Bangladesh)
12:45 PM - 1:00 PM	1570708876	Improving Accuracy of High-Speed Continuous Tap Recognition on Desk Using Acceleration and Sound Amplitude	Yuika Katayama and Ryo Katsuma (Osaka Prefecture University, Japan)
1:00 PM -1:15 PM	1570709423	Performance Analysis of Microstrip Patch Antenna for the Diagnosis of Brain Cancer & Tumor Using the Fifth-Generation Frequency Band	Sayed Abdul Kadir Al-Nahiun, Fardeen Mahbub, Rashedul Islam and Shouherdho Banerjee Akash (American International University-Bangladesh, Bangladesh); Raja Rashidul Hasan (American International University Bangladesh, Bangladesh); Md. Abdur Rahman (American International University-Bangladesh (AIUB), Bangladesh)

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PARALLEL SESSIONS : 1

SESSION 9 : Mobile Communication

SESSION CHAIR: Dr. Haissam Badih, Oakland University (Rapporteur:Prof. Koushik Deb, Prof. Anupam Mondal)

SESSION TIME: 11:15 A.M- 12:45 P.M

PARTICIPATION LINK:

TIME ALLOTTED	PAPER ID	PAPER NAME	AUTHORS WITH AFFILIATION & COUNTRY
11:15 A.M- 11:30 P.M	1570709019	Execution of Hybrid NOMA Schemes Concerning Outage Performance and Sum Rate Interplay	Anindya Bal and Rahat Tajwar (BRAC University, Bangladesh)
11:30 P.M - 11:45 PM	1570703918	Design and Implementation of ZigBee Based Low-Power Wireless Sensor and Actuator Network (WSAN) for Automation of Urban Garden Irrigation Systems	Asrorbek Eraliev and Giovanni Bracco (Politecnico di Torino University, Italy)
11:45 PM - 12:00 PM	1570711103	COVID-19 Zero-Interaction School Attendance System	Emily Sawall, Amber Honnef and Mohamed Mohamed (University of Wisconsin-Geen Bay, USA); Ali Abdullah S. AlQahtani (University of Wisconsin-Green Bay, USA); Thamraa Alshayeb (University of Wisconsin Green Bay, USA)
12:00 PM -12:15 PM	1570709354	Roadmap of Security Threats Between IPv4/IPv6	Fadi Abusafat (University of Minho, Portugal)
12:15 PM -12:30 PM	1570711150	A Systematic Literature Review on Malware Analysis	Fahad Mira, MIRA FAHAD (University of Bedfordshire & JEDDAH 21431, Saudi Arabia)
12:30 PM -12:45 PM	1570709482	Segment-Routing Analysis: Proof-Of-Concept Emulation in IPv4 and IPv6 Service Provider Infrastructures	Gustavo Salazar (Universidad Nacional de la Plata - UNLP & Pontificia Universidad Católica del Ecuador - PUCE, Ecuador); Andy Reinoso García (Pontificia Universidad Católica del Ecuador - PUCE, Ecuador)

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PARALLEL SESSIONS : 2

SESSION 10 : Mobile Communication

SESSION CHAIR: Dr. Kanika Sood (California State University, Fullerton, USA) (Rapporteur:Prof. Sainik Kumar Mahato , Dr. Prithwineel Paul)

SESSION TIME: 1:30 P.M- 3:30 P.M

PARTICIPATION LINK:

TIME ALLOTTED	PAPER ID	PAPER NAME	AUTHORS WITH AFFILIATION & COUNTRY
1:30 PM -1:45 PM	1570708538	The Impact of Initial Swarm Formation for Tracking of a High Capability Malicious UAV	Jason Brown and Nawin Raj (University of Southern Queensland, Australia)
1:45 PM -2:00PM	1570711512	Energy-Efficient Vertical Handover in Heterogeneous Networks	Judhistir Mahapatro and Pratyashi Satapathy (National Institute of Technology Rourkela, India)
2:00PM-2:15 PM	1570705413	Comparison and Analysis of Different Feeding Techniques for MIMO Antenna's UWB Applications with Defected Ground Structure	Mohan K N, K Himaja Reddy and N Yasaswini (KLEF Deemed to be University, India)
2:15 PM -2:30 PM	1570711220	Mitigating Remote Code Execution Vulnerabilities: A Study on Tomcat and Android Security Updates	Stephen Bier, Brian Fajardo, Obinna Ezeadum, German Guzman, Kazi Zakia Sultana and Vaibhav Anu (Montclair State University, USA)
2:30 PM - 2:45 PM	1570712303	Analysis of the Impact of Traffic Density on the Compromised CAV Rate: A Multi-Agent Modeling Approach	Kamal Azghiou (Mohammed First University & EI team, Morocco); Manal El Mouhib (EDER Research Team, Morocco)
2:45 PM - 3:00 PM	1570706720	Applications of Cryptography in Database: A Review	Huanhao Xu (New York University, USA); Kutub Thakur (New Jersey City University, USA); Abu Kamruzzaman (Pace University, USA); Md L Ali (Rider University, USA)
3:00 PM -3:15PM	1570711731	Context-Aware Authorization Model for Smartphones	Moeiz Miraoui (Umm Al-Qura, Saudi Arabia)
3:15PM -3:30 PM	1570703275	Security Procedures for User-Centric Ultra-Dense 5G Networks	Mohammed Rajhi (Jazan University)

** All the timings are given in Eastern Daylight Time (EDT)*

PARALLEL SESSIONS : 2

SESSION 11 : Mobile Communication

SESSION CHAIR: Dr. Ashiq Sakib (Florida Polytechnic University) (Rapporteur:Prof. Rintu Kumar Gayen , Prof. Sutapa Rayadhikary)

SESSION TIME: 1:30 P.M- 3:30 P.M

PARTICIPATION LINK:

TIME ALLOTTED	PAPER ID	PAPER NAME	AUTHORS WITH AFFILIATION & COUNTRY
1:30 PM -1:45 PM	1570711211	Manipulating GPS Signals to Determine the Launch Location of Drones in Rescue Mode	Hosam Alamleh (University of North Carolina Wilmington & Louisiana Tech University, USA); Nicholas C Roy (University of North Carolina Wilmington, USA)
1:45 PM -2:00PM	1570709407	Water Level Control System Using a Programmable Logic Controller PLC: Rujban Water Supply System	Yousef Ali and Omar A. Zargelin (Al Zintan University, Libya); Fadel M Lashhab (Howard University & Washington DC, USA); Abdulbasit Alaribi (Al Zintan University, Libya)
2:00PM-2:15 PM	1570709336	Mechatronics Application for a Smart Inhaler	Patricia Enrique, Dorothy Yang, Matthew Rose, Steven Ding and James Tung (University of Waterloo, Canada)
2:15 PM -2:30 PM	1570706825	On the Security of Cyber-Physical Systems (CPS) Against Stochastic Cyber-Attacks (SCA) Models	Qasem Abu Al-Haija (University of Petra (UoP), Jordan)
2:30 PM - 2:45 PM	1570703679	The Development of a Routing Protocol Based on Reverse-AODV by Considering an Energy Threshold in VANET	Gedalia Nabe Razafindrobolina (ITS, Indonesia); Radityo Anggoro (Institut Teknologi Sepuluh Nopember, Indonesia); Ary Mazharuddin Shiddiqi (Sepuluh Nopember Institute of Technology, Indonesia)
2:45 PM - 3:00 PM	1570709167	On the Event Reporting of Intra/Inter-Cluster Sensor Networks	Raed Taleb Al-Zubi, Abdulraheem A. Kreishan, Mohammad Q. Alawad and Khalid A. Darabkh (The University of Jordan, Jordan)
3:00 PM -3:15PM	1570709497	Improving Connectivity at Ships and Planes Through Land-Based BTS and Point-To-Point Antennas	Shahriar Khan (Independent University, Bangladesh)
3:15PM -3:30 PM	1570705042	How Stability of Hybrid Coupler Characteristic Affects Front-End Isolation of In-Band Full Duplex System	Soheyl Soodmand, Kevin A Morris and Mark Beach (University of Bristol, United Kingdom (Great Britain))

** All the timings are given in Eastern Daylight Time (EDT)*

PARALLEL SESSIONS : 2

SESSION 12 : Mobile Communication

SESSION CHAIR: Dr. Md. Abdur Razzak (Independent University, Bangladesh) (Rapporteur: Dr. Sunita Agarwala, Prof. Soma Das)

SESSION TIME: 1:30 P.M- 3:30 P.M

PARTICIPATION LINK:

TIME ALLOTTED	PAPER ID	PAPER NAME	AUTHORS WITH AFFILIATION & COUNTRY
1:30 PM -1:45 PM	1570711429	Narrow Band Hairpin Bandpass Filter for 4G LTE Applications	Vinod P (Rajiv Gandhi University of Knowledge Technologies, India)
1:45 PM -2:00PM	1570711629	Design and Implementation of an Efficient Elliptic Curve Digital Signature Algorithm (ECDSA)	Yasin Genç and Erkan Afacan (Gazi University, Turkey)
2:00PM-2:15 PM	1570711144	Improved Encryption Scheme Based on the Automorphism Group of the Ree Function Field	Yevgen Kotukh (Sumy State University & Unlink VR Inc., Ukraine); Gennady Khalimov and Svitlana Khalimova (Kharkiv National University of Radioelectronics, Ukraine)
2:15 PM -2:30 PM	1570711292	Telemetry System for 2D Flow Map Using Ultrasonic Velocity Profiler	Zeliang Zhang, Munkhbat Batsaikhan, Wongsakorn Wongsaroj, Naruki Shoji, Hideharu Takahashi and Hiroshige Kikura (Tokyo Institute of Technology, Japan)
2:30 PM - 2:45 PM	1570713050	Efficient CPW Fed UWB Antenna with Multiple Notch Characteristics for Wireless Applications	Srijita Chakraborty (Institute of Engineering & Management, Kolkata, India)
2:45 PM - 3:00 PM	1570708751	Communication Chain in the Internet of Things with Spread-Out Electronic Device System Abstraction	Andrei Bragarenco (Technical University of Moldova & Engineering Club Microlab (NGO), Moldova); Galina Marusic (Technical University of Moldova, Moldova); Calin Ciufudean (Stefan cel Mare University, Romania)
3:00 PM -3:15PM	1570711520	Proactive Measures to Mitigate Cyber Security Challenges in IoT Based Smart Healthcare Networks	Marshal R and Gobinath K (Ministry of Electronics and Information Technology, Government of India, India); Venkateswara Rao (JNTUK & DeitY, India)
3:15PM -3:30 PM	1570708991	A Hybrid Framework for Securing Data Transmission in Internet of Things (IoTs) Environment Using Blockchain Approach	Hayman Salih Mohammed Mohammed (Sapienza University di Roma, Italy)

** All the timings are given in Eastern Daylight Time (EDT)*

DAY 3: 23rd April, 2021

TIME	NAME OF THE EVENT	PARTICIPATION LINK
8:45 A.M – 9:30 A.M	KEYNOTE5 (Prof. Raafat R. Mansour, Professor, Canada Research Chair, Electrical and Computer Engineering Department, University of Waterloo, Canada) Title: CMOS-MEMS Devices for Communication Systems and Nano Instrumentations	
9:30 A.M – 10:15 A.M	KEYNOTE 6 (Prof. David Campbell, Professor, Department of Electrical and Computer Engineering, Boston University, USA) Title: “Graphene Kirigami as a platform for stretchable and tunable quantum dot arrays.	
10:15 A.M-11:00 A.M	KEYNOTE 7 (Prof. Krishna Saraswat, Rickey/Nielsen Chair Professor, Stanford University, USA) Title: “Emerging Interconnect Technologies for Nanoelectronics”	

** All the timings are given in Eastern Daylight Time (EDT)*

PARALLEL SESSIONS : 1

SESSION 13 : IOT & Data Science

SESSION CHAIR: Dr. Md L Ali (Rider University, USA) (Rapporteur:Prof Nirban Kumar Saha , Prof. Sahitya Roy)

SESSION TIME: 11:15 A.M- 01:15 P.M

PARTICIPATION LINK:

TIME ALLOTTED	PAPER ID	PAPER NAME	AUTHORS WITH AFFILIATION & COUNTRY
11:15 A.M -11:30 AM	1570711276	Privacy-Preserving Zero-Effort Class Attendance Tracking System	Hosam Alamleh (University of North Carolina Wilmington & Louisiana Tech University, USA); Jake Aldridge and Aidan Shene (University of North Carolina Wilmington, USA)
11:30 AM - 11:45 AM	1570708062	On Error Correction Performance of LDPC and Polar Codes for the 5G Machine Type Communications	Belhadj Salima (Algeria); Moulay Lakhdar Abdelmounaim (University of Bechar, Algeria)
11:45 AM -12:00 PM	1570704958	Network Routing in SDNs Using Topology Based Multitask Neural Modelling	Sowmya Sanagavarapu and Sashank Sridhar (Anna University, India)
12:00 PM - 12:15 PM	1570711312	A Design of Greenhouse Monitoring System Based on Low-Cost Mesh Wi-Fi Wireless Sensor Network	Tung Cao Pham (Vietnamese German University, Vietnam)
12:15 PM – 12:30 PM	1570711022	IT Infrastructure Agile Adoption for SD-WAN Project Implementation in Pharmaceutical Industry: Case Study of an Indonesian Company	Anita Nur Fitriani, Teguh Raharjo, Bob Hardian and Adi Prasetyo (Universitas Indonesia, Indonesia)
12:30 PM - 12:45 PM	1570705258	Dynamic Hand Gesture Pattern Recognition Using Probabilistic Neural Network	Debasish Bal (International Islamic University Chittagong, Bangladesh); Asif Mohammed Arfi (University of Yamanashi, Bangladesh)
12:45 PM – 1:00 PM	1570705268	Privacy Enhanced Energy Prediction in Smart Building Using Federated Learning	Sai Venketesh Dasari and Kaushal Mittal (International Institute of Information Technology, Bangalore, India); Sasirekha Gvk (Electronics City & IIIT Bangalore, India); Jyotsna Bapat (International Institute of Information Technology, India); Debabrata Das (International Institute of Information Technology - Bangalore, India)
1:00 PM -1:15 PM	1570708057	The Demographic Profile Most at Risk of Being Disinformed	Kevin Matthe Caramancion (University at Albany, USA)

** All the timings are given in Eastern Daylight Time (EDT)*

PARALLEL SESSIONS : 1

SESSION 14 : Information Theory

SESSION CHAIR:Dr. Shahriar Khan (Independent University, Bangladesh) (Rapporteur:Prof. Manas Midya, Prof.Sutanu Ghosh)

SESSION TIME: 11:15 A.M- 01:00 P.M

PARTICIPATION LINK:

TIME ALLOTTED	PAPER ID	PAPER NAME	AUTHORS WITH AFFILIATION & COUNTRY
11:15 A.M - 11:30 AM	1570709366	Music Genre Classification: A Review of Deep-Learning and Traditional Machine-Learning Approaches	Ndiatenda Ndou (University of the Witwatersrand, South Africa); Ritesh Ajoodha (The University of the Witwatersrand, Johannesburg, South Africa); Ashwini M Jadhav (University of the Witwatersrand, South Africa)
11:30 AM - 11:45 AM	1570709135	An IoT Based System with Edge Intelligence for Rice Leaf Disease Detection Using Machine Learning	S. M. Shahidur Harun Romy, Md. Ishan Arefin Hossain, Forji Jahan and Tanjina Tanvin (Southeast University, Bangladesh)
11:45 AM - 12:00 PM	1570709225	Metadata Replication with Synchronous OpCodes Writing for Namenode Multiplexing in Hadoop	Taeha Kim and Sangyoon Oh (Ajou University, Korea (South))
12:00 PM - 12:15 PM	1570710291	Review of Challenges in Fog and Edge-Based Computing	Dheeraj Basavaraj (California State University, USA); Shahab Tayeb (California State University, Fresno, USA)
12:15 PM – 12:30 PM	1570704662	COVID-19 Identification in CLAHE Enhanced CT Scans with Class Imbalance Using Ensembled ResNets	Sowmya Sanagavarapu and Sashank Sridhar (Anna University, India); Gopal Venkata Tadepalli (College of Engineering, Guindy Campus & Anna University, Chennai, India)
12:30 PM - 12:45 PM	1570709454	My-Covid-Safe-Town: A Mobile Application to Support Post-Covid Recovery of Small Local Businesses	Jorge Torres, Vaibhav Anu, Aparna Varde and Christopher Duran (Montclair State University, USA)
12:45 PM – 1:00 PM	1570711618	RegPattern2Vec: Link Prediction in Knowledge Graphs	Abbas Keshavarzi, Natarajan Kannan and Krys Kochut (University of Georgia, USA)

** All the timings are given in Eastern Daylight Time (EDT)*

PARALLEL SESSIONS : 1

SESSION 15: Information Theory

SESSION CHAIR: Dr. Vilas H Gaidhane (Birla Institute of Technology and Science Pilani, Dubai Campus, India) (Rapporteur: Prof. Amitava Ghosh, Prof. Pallabi Pramanik)

SESSION TIME: 11:15 A.M- 01:00 P.M

PARTICIPATION LINK:

TIME ALLOTTED	PAPER ID	PAPER NAME	AUTHORS WITH AFFILIATION & COUNTRY
11:15 A.M -11:30 AM	1570709240	Design and Development of Wearable Multi- Sensory Smart Device for Human Safety	Shahriar Tasnim, Neamul Hossain, Johurul Haque Ovi, Nuheen Islam and Saniat Rahman Zishan (American International University-Bangladesh, Bangladesh)
11:30 AM - 11:45 AM	1570710912	RCNX: Residual Capsule NeXt	Arjun Narukkanchira Anilkumar (IUPUI, USA); Mohamed El-Sharkawy (Purdue School of Engineering and Technology, USA)
11:45 AM -12:00 PM	1570710961	Image Classification with CondenseNeXt for ARM-Based Computing Platforms	Priyank Kalgaonkar and Mohamed El-Sharkawy (Purdue School of Engineering and Technology, USA)
12:00 PM - 12:15 PM	1570712434	Cyber Physical Systems, a New Challenge and Security Issue for the Aviation	Faisal Alrefaei and Houbing Song (Embry-Riddle Aeronautical University, USA); Abdullah Alzahrani and Mohamed Zohdy (Oakland University, USA); Salma Alrefaei (Taibah University, Saudi Arabia)
12:15 PM – 12:30 PM	1570708550	Detection and Prevention of Blackhole Attack in AODV of MANET	Asif Uddin Khan (Silicon Institute of Technology, Bhubaneswar, India); Rajesh Puree (Utkal University, Odisha, India); Bhabendu Kumar Mohanta (KLU, Koneru Lakshmaiah Education Foundation, India); Sangay Chedup (Jigme Namgyel Engineering College & Royal University of Bhutan, Bhutan)
12:30 PM - 12:45 PM	1570702224	A Hybrid Blockchain Consensus Algorithm Using Locational Marginal Pricing for Energy Applications	Soham Ghosh (University of Kansas & Black & Veatch, USA); Raj S Dutta (Illinois Institute of Technology, USA)
12:45 PM – 1:00 PM	1570709399	MicroPython-Based Sensor Node with Asymmetric Encryption for Ubiquitous Sensor Networks	Ulrich ter Horst (University of Applied Sciences Hamburg, Germany); Stephan Schulz and Hagen Hasberg (Author, Germany)

** All the timings are given in Eastern Daylight Time (EDT)*

PARALLEL SESSIONS : 2

SESSION 16 : Information Theory

SESSION CHAIR: Dr. Fadel M Lashhab (Howard University & Washington DC, USA)(Rapporteur:Prof. Sourav Ghosh, Prof. Monalisa Dey)

SESSION TIME:1:30 P.M- 3:30 P.M

PARTICIPATION LINK:

TIME ALLOTTED	PAPER ID	PAPER NAME	AUTHORS WITH AFFILIATION & COUNTRY
1:30 PM -1:45 PM	1570711109	Machine Learning Approach for Clustering of Countries to Identify the Best Strategies to Combat Covid-19	Narayana Darapaneni (Great Learning, India & Northwestern University, USA); Prashant Kumar, Venkatasubramanian J, Krishna Chaitanya Thangeda, Vigneswar S, Abhaya Thakur and Anwesh Reddy Paduri (Great Learning, India)
1:45 PM -2:00 PM	1570706365	Expert Finding in Scholarly Data: An Overview	Wael M.S Yafooz and Abrar Almuhanha (Taibah University, Saudi Arabia)
2:00 PM -2:15 PM	1570708470	Blockchain Technology to Manage the Energy Supply of Real Estate	Aleksandr V. Belov (National Research University Higher School of Economics, Russia)
2:15 PM - 2:30 PM	1570711534	Simulation of the Impact of a Submerged Jet with a Shield During Metal Welding for Use in the Arctic	Alexey Lagunov (Northern Arctic Federal University named after M. V. Lomonosov, Russia)
2:30 PM -2:45 PM	1570711609	Practical IoT-Enabled Monitoring Platform for Solid Waste Collection	Aouache Mustapha (Center for Development of Advanced Technologies (CDTA), Algeria)
2:45 PM -3:00PM	1570711055	Automatic Diagnosis of Venous Thromboembolism Risk Based on Machine Learning	Vera Sa-ing and Autcharaporn Sukperm (Srinakharinwirot University, Thailand); Polapat Rojnuckarin and Benjaporn Akkawat (Faculty of Medicine, Chulalongkorn University, Thailand)
3:00PM-3:15 PM	1570709462	The Impact of Social Media Marketing on the Travel Intention of Z Travelers	Bui Thanh Khoa (Industrial University of Ho Chi Minh City, Vietnam)
3:15 PM- 3:30 PM	1570711472	Two-Stream Emotion-Embedded Autoencoder for Speech Emotion Recognition	Chenghao Zhang and Lei Xue (School of Communication and Information Engineering, Shanghai University, China)

** All the timings are given in Eastern Daylight Time (EDT)*

PARALLEL SESSIONS : 2

SESSION 17 : Information Theory

SESSION CHAIR: Dr. Shahab Tayeb (California State University, Fresno, USA) (Rapporteur: Dr. Soumadip Ghosh, Prof. Darothi Sarkar)

SESSION TIME:1:30 P.M- 3:30 P.M

PARTICIPATION LINK:

TIME ALLOTTED	PAPER ID	PAPER NAME	AUTHORS WITH AFFILIATION & COUNTRY
1:30 PM -1:45 PM	1570708614	Use of Vehicle Breathalyzers in the Reduction of DUI Deaths	Evan Yousif, Dafer Alali, Surah Al dakhil and Mohamed Zohdy (Oakland University, USA)
1:45 PM -2:00 PM	1570709299	Resolving Wicked Problems Using a Causal Bayesian Network Based Model	Daniel T Semwayo (University of Witwatersrand, South Africa)
2:00 PM -2:15 PM	1570707085	Numerical and Simulation Verification for Optimal Server Allocation in Edge Computing	Dawei Li, Chigozie Asikaburu and Jiacheng Shang (Montclair State University, USA); Ning Wang (Rowan University, USA)
2:15 PM - 2:30 PM	1570711337	A Robotic Prosthesis as a Functional Upper-Limb Aid: An Innovative Review	Deyby Huamanchahua (Facultad de Ingeniería, Universidad ESAN, Peru)
2:30 PM -2:45 PM	1570711377	Mechatronic Exoskeletons for Lower-Limb Rehabilitation: An Innovative Review	Deyby Huamanchahua (Facultad de Ingeniería, Universidad ESAN, Peru)
2:45 PM -3:00PM	1570710744	MLP for Spatio-Temporal Traffic Volume Forecasting	Asimina Dimara (Centre for Research and Technology Hellas, Greece); Dimitrios Triantafyllidis (The Centre for Research & Technology, Hellas - CERTH & Information Technology Institute - ITI, Greece); Stelios Krinidis and Konstantinos Kitsikoudis (Centre for Research and Technology Hellas, Greece); Dimosthenis Ioannidis (Information Technologies Institute, Greece); Efthalia Valkouma and Stilianos Skarvelakis (Egnatia Odos SA, Greece); Stavros Antipas (Patras Port Authority S. A, Greece); Dimitrios Tzovaras (Centre for Research and Technology Hellas, Greece)
3:00PM-3:15 PM	1570710885	Application of Machine Learning Techniques to the Prediction of Student Success	Eluwumi Folake Buraimoh, Ritesh Ajoodha and Kershree Padayachee (The University of the Witwatersrand, Johannesburg, South Africa)
3:15 PM- 3:30 PM	1570709346	Analysis of Optimized Machine Learning and Deep Learning Techniques for Spam Detection	Fahima Hossain (Dhaka & Jagannath University, Bangladesh); Mohammed Nasir Uddin (Jagannath University, Bangladesh); Rajib Kumar Halder (Jagannath University, Bangladesh)

** All the timings are given in Eastern Daylight Time (EDT)*

PARALLEL SESSIONS : 2

SESSION 18 : Information Theory

SESSION CHAIR: Dr. Sudarshan S Chawathe (University of Maine, USA) (Rapporteur:Dr. Anjan Pal, Prof. Srijita Basu)

SESSION TIME:1:30 P.M- 3:30 P.M

PARTICIPATION LINK:

TIME ALLOTTED	PAPER ID	PAPER NAME	AUTHORS WITH AFFILIATION & COUNTRY
1:30 PM -1:45 PM	1570710826	Approaches in Determining Software Development Methods for Organizations: A Systematic Literature Review	Fahmi Alaydrus (University of Indonesia, Indonesia)
1:45 PM -2:00 PM	1570709783	Encoder-Decoder Model for Automatic Video Captioning Using Yolo Algorithm	Hanan Alkalouti (KAU, Saudi Arabia); Miada A. Almasre M (King AbdulAziz University, Saudi Arabia)
2:00 PM -2:15 PM	1570709249	MiniCon: Automatic Enforcement of a Minimal Capability Set for Security-Enhanced Containers	Haney Kang, Jinwoo Kim and Seungwon Shin (KAIST, Korea (South))
2:15 PM - 2:30 PM	1570711426	Predicting the Impact of Covid-19 Pandemic in India	Narayana Darapaneni (Great Learning, India & Northwestern University, USA); Harpreet Singh, Suma Maram, Sathish Nagam, Mandeep Kour and Anwesh Reddy Paduri (Great Learning, India)
2:30 PM -2:45 PM	1570709402	Disruption and Protection of Online Synchronous Learning Environments via 802.11 Manipulation	Matthew Tigner and Hayden Wimmer (Georgia Southern University, USA)
2:45 PM -3:00PM	1570708491	Statistical and Transfer Learning Model to Analyze Endurance Performance with Aging	He Huang (University of North Dakota, USA); Ebrima N Ceesay (George Mason University, USA)
3:00PM-3:15 PM	1570710538	Invariant Continuation of Multi-Valued Logic Functions and Their Implementation	Ibrokhimali H Normatov, DSc (National University of Uzbekistan named after Mirzo Ulugbek, Uzbekistan)
3:15 PM- 3:30 PM	1570701341	Algorithmic Method of Security of the Internet of Things Based on Steganographic Coding	Islambek Mirzabaevich Saymanov (National University of Uzbekistan, Uzbekistan)

** All the timings are given in Eastern Daylight Time (EDT)*

DAY 4:

TIME	NAME OF THE EVENT	PARTICIPATION LINK
8:45 A.M – 9:30 A.M	KEYNOTE8 (Dr. Bonita Bhaskaran, Principal Engineer, NVIDIA, USA)	
9:30 A.M – 10:15 A.M	KEYNOTE9 (Prof. Sean Follmer, Department of Mechanical Engineering and Computer Science, Stanford University, USA)	
10:15 A.M-11:00 A.M	KEYNOTE10 (Prof. Nicholas Bambos, Professor, Department of Electrical Engineering and Management Science, Stanford University, USA)	
3:45 P.M- 4:15 P.M	Valedictory Session	

** All the timings are given in Eastern Daylight Time (EDT)*

PARALLEL SESSIONS : 1

SESSION 19 : Information Theory

SESSION CHAIR: Dr. Tri Minh Tran (Gunma University & Japan, Japan); (Rapporteur: Prof. Ankit Ray Ghatak , Prof. Debasis Jana)

SESSION TIME: 11:15 A.M- 01:15 P.M

PARTICIPATION LINK:

TIME ALLOTTED	PAPER ID	PAPER NAME	AUTHORS WITH AFFILIATION & COUNTRY
11:15 A.M -11:30 AM	1570706774	Approach for the Wound Area Measurement with Mobile Devices	Filipe Ferreira (Instituto Politécnico de Castelo Branco, Portugal); Ivan Miguel Pires (Instituto de Telecomunicações, Portugal); Vasco Ponciano (Instituto Politécnico de Castelo Branco, Portugal); Monica Isabel Costa (Polytechnic Institute of Castelo Branco & EST, Portugal); Nuno M. Garcia (Universidade da Beira Interior & Instituto de Telecomunicações, Universidade Lusófona de Humanidades e Tecnologias, Portugal)
11:30 AM - 11:45 AM	1570711263	An Efficient Multihoming Scheme to Support Seamless Handover in SDN-Based Network Mobility	Jae Won Lim, Tahira Mahboob and Min Young Chung (Sungkyunkwan University, Korea (South))
11:45 AM -12:00 PM	1570710962	Deployment of Compressed MobileNet V3 on iMX RT 1060	Kavyashree Prasad and Mohamed El-Sharkawy (Purdue School of Engineering and Technology, USA)
12:00 PM - 12:15 PM	1570711407	Assessment of Risk Estimates and Fatalities Involved with Covid-19	Narayana Darapaneni (Great Learning, India & Northwestern University, USA); Jayasurya M, Krishna Chaitanya, Abhay Singh, Mukesh Kumar, Sumanth S and Anwesh Reddy Paduri (Great Learning, India)
12:15 PM – 12:30 PM	1570705174	Effects of Noise on Machine Learning Algorithms Using Local Differential Privacy Techniques	Krishna Chaitanya Gadepally (BITS Pilani, India)
12:30 PM - 12:45 PM	1570708337	Predicting Hospital Beds Utilization for COVID-19 in Telangana, India	Narayana Darapaneni (Great Learning, India & Northwestern University, USA); Sateesh Kumar Talupuri, Shruti Galande, Mahita Gm, Vasundhara Konanki, Chiru Hasini Tondapu and Anwesh Reddy Paduri (Great Learning, India)
12:45 PM – 1:00 PM	1570711187	Identifying Phasic Dopamine Releases Using DarkNet-19 Convolutional Neural Network	Qasem Abu Al-Haija (University of Petra (UoP), Jordan); Mahmoud A. Smadi (The Hashemite University, Jordan); Osama Bataineh (Hashemite University, Jordan)
1:00 PM -1:15 PM	1570711637	Magnet Integrated Shirt for Upper Body Posture Detection Using Wearable Magnetic Sensors	Mary Farnan and Emily Dolezalek (University of St. Thomas, USA); Cheol-Hong Min (University of Saint Thomas, USA)

** All the timings are given in Eastern Daylight Time (EDT)*

PARALLEL SESSIONS : 1

SESSION 20 : Information Theory

SESSION CHAIR: Dr. Vilas H Gaidhane (Birla Institute of Technology and Science Pilani, Dubai Campus, India) (Rapporteur:Prof. Kaushik Patra , Dr. Subhabrata Banerjee)

SESSION TIME: 11:15 A.M- 01:15 P.M

PARTICIPATION LINK:

TIME ALLOTTED	PAPER ID	PAPER NAME	AUTHORS WITH AFFILIATION & COUNTRY
11:15 A.M -11:30 AM	1570711616	Ensemble of Supervised and Unsupervised Learning Models to Predict a Profitable Business Decision	Maryam Heidari (George Mason University, USA)
11:30 AM - 11:45 AM	1570708271	A Novel Dataset Based Algorithm for the Fastest Shipping by Allocating Nearest Supplier	Md Intiaz Ahmed (Daffodil Institute of IT, Bangladesh)
11:45 AM -12:00 PM	1570708507	Parallel Algorithm for Modeling Temperature Fields Using the Splines Methods	Muslimjon Kuchkarov, Hakimjon Zaynidinov and Oybek Mallayev (Tashkent University of Information Technologies, Uzbekistan)
12:00 PM - 12:15 PM	1570711525	Success Criteria and Factor for IT Project Application Implementation in Digital Transformation Era: A Case Study Financial Sector Industry	Ni Wayan Trisnawaty (University of Indonesia, Indonesia); Teguh Raharjo, Bob Hardian and Adi Prasetyo (Universitas Indonesia, Indonesia)
12:15 PM – 12:30 PM	1570708095	Mobile Application Recommendation System for Mobile Data Plan Research in Progress	Mohamed Imran Mohamed Ariff and Nor Ainol Yaqin Fadzil (Universiti Teknologi MARA Perak Branch, Malaysia); Noreen Izza Arshad (Universiti Teknologi PETRONAS, Malaysia); Khairulliza Ahmad Salleh (Universiti Teknologi MARA Perak Branch, Tapah Campus, MALAYSIA); Jufiza A.Wahab (Universiti Teknologi MARA Perak Branch, Tapah Campus, MALAYSIA); Anis Zafirah Azmi (Universiti Teknologi MARA Perak Branch, Tapah Campus, MALAYSIA)
12:30 PM - 12:45 PM	1570709558	Detecting Secret Messages in Images Using Neural Networks	Nour Mohamed and Tamer Rabie (University of Sharjah, United Arab Emirates); Ibrahim Kamel (University of Sharjah & Concordia University, United Arab Emirates); Khawla Alnajjar (University of Sharjah, United Arab Emirates);
12:45 PM – 1:00 PM	1570704966	A Light-Based Interpretation of Schrodinger's Wave Equation and Heisenberg's Uncertainty Principle with Implications on Quantum Computation	Pravir Malik (Deep Order Technologies, USA)
1:00 PM -1:15 PM	1570707105	Imputation Analysis of Central Tendencies for Classification	Ramprakash Pavithrakannan, Nikitta Baker Fenn, Sriram Raman, Varadharajan Kalyanaraman, Vignesh Kumar Murugananthan and Jeevanandham Janarthanan (Lambton College, Canada)

** All the timings are given in Eastern Daylight Time (EDT)*

PARALLEL SESSIONS : 1

SESSION 21 : Information Theory

SESSION CHAIR: Dr. Hayden Wimmer (Georgia Southern University, USA) (Rapporteur:Dr. Gobindo Sen, Prof. Murari Shaw)

SESSION TIME: 11:15 A.M- 01:15 P.M

PARTICIPATION LINK:

TIME ALLOTTED	PAPER ID	PAPER NAME	AUTHORS WITH AFFILIATION & COUNTRY
11:15 A.M -11:30 AM	1570707184	Face Mask Recognition with Realistic Fabric Face Mask Data Set: A Combination Using Surface Curvature and GLCM	Regina Lionnie, Catur Apriono and Dadang Gunawan (Universitas Indonesia, Indonesia)
11:30 AM - 11:45 AM	1570708174	A Novel Machine Learning Based Screening Method for High-Risk Covid-19 Patients Based on Simple Blood Exams	Narayana Darapaneni (Great Learning, India & Northwestern University, USA); Richa Agrawal, Arti Kumari, Mohit Gupta, Sachin Padasali, Prabu Purushothaman and Anwesh Reddy Paduri (Great Learning, India)
11:45 AM -12:00 PM	1570713896	Diseased Surface Assessment of Maize Cercospora Leaf Spot Using Hybrid Gaussian Quantum-Behaved Particle Swarm and Recurrent Neural Network	Ronnie S. Concepcion II (De La Salle University, Philippines); Elmer P. Dadios (Philippines, Philippines); Jonnel Alejandrino, Christan Mendigoria, Heinrick Aquino and Oliver John Alajas (De La Salle University, Philippines)
12:00 PM - 12:15 PM	1570709560	Habitability of Exoplanets Using Deep Learning	Rutuja Jagtap, Unzela Inamdar, Shivani Dere, Maziya Fatima and Nikhilkumar Shardoor (MIT School of Engineering, MIT-ADT University, India)
12:15 PM – 12:30 PM	1570709319	A Concrete Churn Prediction Technique Based on XGBoost - A Situational Research Within the Telecommunication Industry in Sri Lanka	Senthan Prasanth (Physical Sciences and Technology, Faculty of Applied Sciences, Sabaragamuwa University of Sri Lanka, Sri Lanka); Rathnayaka Mudiyansele Kapila Tharanga Rathnayaka (Sabaragamuwa University of Sri Lanka, Sri Lanka); Banujan Kuhaneswaran (Sabaragamuwa University of Sri Lanka, Sri Lanka); Banage Kumara (Sabaragamuwa University of Sri Lanka, Sri Lanka & University of Aizu, Japan)
12:30 PM - 12:45 PM	1570709428	Resilience of Autonomous Vehicle Object Category Detection to Universal Adversarial Perturbations	Mohammad Nayeem Teli and Seungwon Oh (University of Maryland, USA)
12:45 PM – 1:00 PM	1570708179	American Sign Language Detection Using Instance-Based Segmentation	Narayana Darapaneni (Great Learning, India & Northwestern University, USA); Yashraj Tambe, Vihan Parmar, Prasad Gandole, Anshuman Dwivedi, Kirthi Krishnan Ganeshan, Sureshkumar Ramasamy and Anwesh Reddy Paduri (Great Learning, India)
1:00 PM -1:15 PM	1570705475	Explainable Predictions of Industrial Emissions	Sudarshan S Chawathe (University of Maine, USA)

** All the timings are given in Eastern Daylight Time (EDT)*

PARALLEL SESSIONS : 2

SESSION 22 : Information Theory

SESSION CHAIR: Dr. Fadel M Lashhab (Howard University & Washington DC, USA) (Rapporteur: Prof. Dr. Bikash Choudhuri , Prof. Naveen Kumar Garika)

SESSION TIME: 1:30 P.M- 3:30 P.M

PARTICIPATION LINK:

TIME ALLOTTED	PAPER ID	PAPER NAME	AUTHORS WITH AFFILIATION & COUNTRY
1:30 PM -1:45 PM	1570708768	Economic Inclusion in the United States: Predictive Analysis of COVID-19 Pandemic on County Rates of Unbanked Households	Timur Berdibekov, Pruthvi Reddy Pasnoor, Asmitha Rao Annamaneni and Ebrima N Ceesay (George Mason University, USA)
1:45 PM -2:00 PM	1570708815	Precision Gesture-Based Inputs for Smartphone with Two Consecutive Simple Gestures	Tomoaki Amiya and Ryo Katsuma (Osaka Prefecture University, Japan)
2:00 PM -2:15 PM	1570708238	Traffic Monitoring and Analysis at Toll Plaza	Narayana Darapaneni (Great Learning, India & Northwestern University, USA); Parikshit Bangde (Shri Ramdeobaba College of Engineering and Management, India); Amit Mane, Umang Maheshwari and Sushilkumar C Thorawade (Great Learning, India); Rushikesh Prakash Borse (E&TC Engineeering, MIT Academy of Engineering, Alandi, Pune & Indian Institute of Technology, India); Anwesh Reddy Paduri (Great Learning, India)
2:15 PM - 2:30 PM	1570709003	Understanding the Information Disseminated Using Twitter During the COVID-19 Pandemic	Jorge Torres, Vaibhav Anu and Aparna Varde (Montclair State University, USA)
2:30 PM -2:45 PM	1570709369	Decision Making Engine for Task Offloading in On-Device Inference Based Mobile Applications	Vihanga Ashinsana Wijayasekara and Prathieshna Vekneswaran (Informatics Institute of Technology, Sri Lanka)
2:45 PM -3:00PM	1570711113	Food Image Recognition and Calorie Prediction	Narayana Darapaneni (Great Learning, India & Northwestern University, USA); Vishal Singh, Yasharth Singh Tarkar, Subhav Kataria, Nayana Bansal, Abhijeet Kharade and Anwesh Reddy Paduri (Great Learning, India)
3:00PM-3:15 PM	1570711076	E-Commerce Case Collection	William P. Haggerty (Georgia Southern University, USA)
3:15 PM- 3:30 PM	1570707050	Multiuser Data Dissemination in OFDMA System Based on Deep Q-Network	Yuan Xing (University of Wisconsin-Stout, USA); Tianchi Zhao (University of Arizona, USA); Cristiano Tapparello (University of Rochester, USA); Yuchen Qian (Baylor University, USA)

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PARALLEL SESSIONS : 2

SESSION 23 : IOT & Data Science

SESSION CHAIR: Dr. Hasan Yasar, Carnegie Mellon University (Rapporteur:Prof. Sayantani Choudhuri , Prof. Aparna Biswas)

SESSION TIME: 1:30 P.M- 3:30 P.M

PARTICIPATION LINK:

TIME ALLOTTED	PAPER ID	PAPER NAME	AUTHORS WITH AFFILIATION & COUNTRY
1:30 PM -1:45 PM	1570711462	Short-Term Prediction of Lightning in Southern Africa Using Autoregressive Machine Learning Techniques	Yaseen Essa and Hugh Hunt (University of the Witwatersrand, South Africa); Ritesh Ajoodha (The University of the Witwatersrand, Johannesburg, South Africa)
1:45 PM -2:00 PM	1570708908	A Cost-Efficient Pulse Rate and Oxygen Saturation Monitor as Part of a Covid19 Symptom Detector: Performance Analysis	Navid Bin Ahmed (Independent University Bangladesh (IUB), Bangladesh); Shahriar Khan (Independent University, Bangladesh); Shazzad Hosain and Nuzhat Haque (North South University, Bangladesh)
2:00 PM -2:15 PM	1570703988	LoRa Cloud-Based Platform for Internet of Things Applications	Mouna Gassara (Sfax University, Tunisia); Elleuchi Manel (ENIS, Tunisia); Mohamed Abid (CES-ENIS, Tunisia)
2:15 PM - 2:30 PM	1570708700	Data Storage in Blockchain Based Architectures for Internet of Things (IoT)	Munavwar Shaikh, Charles Shibu, Enrico Angeles and Deepa Pavithran (Abu Dhabi Polytechnic, United Arab Emirates)
2:30 PM -2:45 PM	1570709360	A Multi-Objective Model Approach to an IoT-Based Granary Monitoring System	Moses O. Onibonoje (Afe Babalola University, Ado Ekiti, Nigeria); Adedayo O. Ojo (Afe Babalola University, Nigeria); Adebayo Ogundipe and Kehinde Adeniji (Afe Babalola University, Ado Ekiti, Nigeria)
2:45 PM -3:00PM	1570706217	Forecasting the Early Market Movement in Bitcoin Using Twitter's Sentiment Analysis: An Ensemble-Based Prediction Model	Ahmed Fakhri Ibrahim (University of Waterloo, Canada)
3:00PM-3:15 PM	1570709055	Software and Hardware Security of IoT	Ashwini Kumar Singh and Nagendra Kushwaha (Indian Institute of Information Technology Pune, India)
3:15 PM- 3:30 PM	1570709353	A Hypothesis Testing Tool for the Comparison of Different Cyber-Security Mitigation Strategies in IoT	Asterios Mpatziakas and Stavros Papadopoulos (Centre for Research and Technology Hellas, Greece); Anastasios Drosou (Centre for Research & Technology Hellas - Information Technologies Institute, Greece); Dimitrios Tzovaras (Rochester, Greece)

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PARALLEL SESSIONS : 2

SESSION 24 : IOT & Data Science

SESSION CHAIR: Dr. Sudarshan S Chawathe (University of Maine, USA) (Rapporteur: Prof. Dr. Rajib Malik , Prof. Joydip Ray)

SESSION TIME: 1:30 P.M- 3:30 P.M

PARTICIPATION LINK:

TIME ALLOTTED	PAPER ID	PAPER NAME	AUTHORS WITH AFFILIATION & COUNTRY
1:30 PM -1:45 PM	1570711296	A Review: Predicting Student Success at Various Levels of Their Learning Journey in a Science Programme	Ashwini M Jadhav (University of the Witwatersrand, South Africa); Judith Mabunda and Ritesh Ajoodha (The University of the Witwatersrand, Johannesburg, South Africa)
1:45 PM -2:00 PM	1570709012	Collaborative Global Impact Cloud Computing Risk Assessment Framework	Lanier Watkins (Johns Hopkins University Information Security Institute, USA); Phillip Cho (Johns Hopkins University Security Institute, USA); John Hurley (Defense Intelligence Agency, USA); Aviel Rubin (Johns Hopkins University, USA)
2:00 PM -2:15 PM	1570705224	Spectrum Segmentation Techniques for Edge-RAN Decoding in Telemetry-Based IoT Networks	Michael Schadhauer (Friedrich-Alexander University Erlangen-Nuremberg, Germany); Joerg Robert (Friedrich-Alexander Universität Erlangen-Nürnberg, Germany); Albert Heuberger (Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany); Bernd Edler (International Audio Laboratories Erlangen, Germany)
2:15 PM - 2:30 PM	1570711448	Designing a Teaching Aid for Microprocessor Class: Case Study Microprocessor Interconnection with Memory	Gunna Cahya Wardiyani, Nyoman Karna and Istikmal Istikmal (Telkom University, Indonesia)
2:30 PM -2:45 PM	1570709171	A Yet Efficient Event Reporting Protocol for Wireless Sensor Networks	Raed Taleb Al-Zubi, Mohammad Q. Alawad, Abdulraheem A. Kreishan and Khalid A. Darabkh (The University of Jordan, Jordan)
2:45 PM -3:00PM	1570706942	Stock Price Prediction Using a Multivariate Multistep LSTM: A Sentiment and Public Engagement Analysis Model	Bipin Aasi, Syeda Aniqah Imtiaz, Hamzah Qadeer, Magdalean Singarajah and Rasha Kashef (Ryerson University, Canada)
3:00PM-3:15 PM	1570709370	Scattering-Based Quality Measures	Rasha Kashef (Ryerson University, Canada)
3:15 PM- 3:30 PM	1570710643	Smart Street Light Management System with Automatic Brightness Adjustment Using Bolt IoT Platform	Sk Mahammad Sorif, Dipanjan Saha and Pallav Dutta (Aliah University, India)

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