

IEEE MIT Undergraduate Research Technology Conference 2019

Poster Presentation Sessions Schedule

Sunday, October 13, 2019 (8:30AM - 10:00AM)

Stata Center - Student Vest Street

Poster Title	Authors	Technical Track
PO19-0004: Printing the Path: Studying a Gelatin-Alginate Composite Hydrogel for Translation of 3D Bioprinting Research	Melissa Stok (Massachusetts Institute of Technology)	BioEECS and Applied Physics
PO19-0006: The Thermodynamics of Covalent Modification Cycles as Biological Switches	Pranay Talla (Horace Greeley High School)	BioEECS and Applied Physics
PO19-0038: Piezoelectric Characterization of a Zinc Oxide Fibrous Composite for Tissue Engineering Applications	Praveen Parthasarathy (NJIT)	BioEECS and Applied Physics
PO19-0062: Multiband Theory of Superconductivity	Joseph Cain (New York University Courant Institute)	BioEECS and Applied Physics
PO19-0064: Bioinspired robots to fight invasive species: when technology inspires nature and not vice versa	Vrishin Soman (New York University Tandon School of Engineering)	BioEECS and Applied Physics
PO19-0071: Full-time Effector Device Identification with Intracortical Brain-Computer Interfaces	Tiancheng Wang (Brown University)	BioEECS and Applied Physics
PO19-0009: Engineering Processable Shape-Memory Thermoplastic Elastomers	Daniel Krajovic (University of Rochester)	Circuits, Materials, and Nanotechnologies
PO19-0015: Developing a Microporous Hydrophobic Membrane from Hydrophilic Cellulose for Membrane Distillation	Sophie Zhang, Ritika Joshi, Benjamin Hsiao (High Technology High School)	Circuits, Materials, and Nanotechnologies
PO19-0024: Synthetic Transition Metal Oxides Prepared by Gel Collection and Characterization of Perovskite Nanocrystal Thin Films for High Performance Dielectric Applications	Jaylene Salas, Nasim Farahmand, Stephen O'Brien (CUNY The City College of New York)	Circuits, Materials, and Nanotechnologies
PO19-0056: Porous Silicon based Optical Sensing in Complex Media: Antifouling Coating	Hayat Abdurahman, Sharon Weiss, Rabeb Layouni, Tengfei Cao, Bradley Baker (The Community College of Baltimore County)	Circuits, Materials, and Nanotechnologies
PO19-0050: Inferring YouTube Streaming QoE from Encrypted Traffic	Trey Gilliland (Columbia University)	Computer Systems
PO19-0001: Implementing Robust Voice-Control for Human Robot Interaction for Autonomous Robot Guides	Mohammed Elmgaghi, Yi Guo (Stevens Institute of Technology)	Human-Computer Interaction and Graphics
PO19-0029: Artificial Muscle Fabrics for Human Augmentation	Temour Raza, Jayson Pusateri, Saurav Basnet (Wentworth Institute of Technology)	Innovative Technologies and Others
PO19-0063: Using NLP to build a multi-modal system to detect radicalization on YouTube	Jaidev Shah (Columbia University)	Innovative Technologies and Others
PO19-0074: Daedalus: Autonomous Energy Transfer	Alyssa Cooper, Ethan Arrowood (Wentworth Institute of Technology)	Innovative Technologies and Others
PO19-0045: Sentiment Analysis of Twitter Data on Cybersecurity	ChingYu Huang, Eunbi Kim, Devon Smart, Kyle Murfitt (Kean University)	Security and Communications
PO19-0049: Security Implementations in the Polyhedral Compilation Infrastructure	Kerri McMahon (St. Joseph's College)	Security and Communications
PO19-0054: IoT Security System	Samiha Riham (New York City College Of Technology)	Security and Communications
PO19-0061: A Practical Analysis of Languages through Honeybots	Nicholas Blaskey, Molly Smith (Marist College)	Security and Communications
PO19-0081: 28 GHz Channel Measurements in the COSMOS Testbed Deployment Area	Angel Estigarribia, Tianyi Dai (Columbia University)	Security and Communications

Poster Presentation Sessions Schedule

Sunday, October 13, 2019 (1:30PM - 3:00PM)

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Poster Title	Authors	Technical Track
PO19-0007: A Novel Approach to the Diagnosis of Heart Disease using Machine Learning and Deep Neural Networks	Sahithi Ankireddy (James B. Conant High School)	Machine Learning / Artificial Intelligence (AI)
PO19-0014: Deep Learning and Sensor Fusion for Building Footprint Extraction	Ryan Sander, Eliza Bradley, Jan Petrich, Adam Dawood, Shawn Hough (MIT)	Machine Learning / Artificial Intelligence (AI)
PO19-0017: Classification of Psychiatric Clinical Note Section Headers	Esther Lin, Yun-En Rebecca Lin (University of British Columbia)	Machine Learning / Artificial Intelligence (AI)
PO19-0028: Generative Multi-Stream Architecture For American Sign Language Recognition	Dom Huh, Sai Gurrupu, Frederick Olson (George Mason University)	Machine Learning / Artificial Intelligence (AI)
PO19-0033: Deep Learning Classification of Optical Coherence Tomography Images for Oral Radiology	Majd Barchini, Hassan S. Salehi (California State University, Chico)	Machine Learning / Artificial Intelligence (AI)
PO19-0034: FAME: Facial Androgyny Measure & Estimation	Melissa Wen (University of Rochester)	Machine Learning / Artificial Intelligence (AI)
PO19-0039: Natural Language Process of Psychiatric Clinical Notes	Yun-En Rebecca Lin, Yung Hwei Esther Lin (University of British Columbia)	Machine Learning / Artificial Intelligence (AI)
PO19-0041: Utilizing Millimeter-Wave Sensors for Human Activity Recognition	Soo Min Kwon, Song Yang, Xin Yang, Jian Liu, Yingying Chen (Rutgers University, New Brunswick)	Machine Learning / Artificial Intelligence (AI)
PO19-0055: Identifying relations and trends on Reddit forums	Zakar Handricken (Bridgewater State University)	Machine Learning / Artificial Intelligence (AI)
PO19-0058: Deep Learning Classifier for Oral Radiology Application	Pouya Zakeri, Majd Barchini, Hassan Salehi (California State University, Chico)	Machine Learning / Artificial Intelligence (AI)
PO19-0010: Perception Action Coordination in Simulated Robot Teleoperation	Sabrina Liu, Alexandra Valiton, Zhi Li (Worcester Polytechnic Institute)	Robotics and Controls
PO19-0013: The Modern Design of SuperHERO	Joycephine Li, Jannat Hoque, Jannatul Mahdi (CUNY New York City College of Technology)	Robotics and Controls
PO19-0031: Dynamic Control of QBot2-Differential Drive Wheeled Mobile Robot	Sabiha Wadoo, Marc Vazquez	Robotics and Controls
PO19-0036: Spatial calibration routine for open source radio astronomy mounting system	Phillip Curtsmith, Stan Borsch, Sterling Pilkington (Wentworth Institute of Technology)	Robotics and Controls
PO19-0043: An Active-Damping Knee Orthosis for Preventing Hyper-Extension in Ehlers-Danlos Syndrome	Maelea Mercado, J. Miles Canino (State University of New York at Canton)	Robotics and Controls
PO19-0047: Efficient Safe Learning for Robotic Systems in Unstructured Environments	Sara Pohland, Sylvia Herbert, Claire Tomlin (University of Maryland, College Park)	Robotics and Controls
PO19-0065: Talk and Roll Bot	bingfang corneliai Chen (New York City College of Technology)	Robotics and Controls
PO19-0076: RoboQueen 3D	Anny Baez Silfa (New York City College of Technology)	Robotics and Controls
PO19-0037: On Tropical Commuting Matrices	Yangxinyu Xie (University of Texas at Austin)	Theoretical Computer Science and Mathematics