

IEEE MIT Undergraduate Research Technology Conference 2020
Poster Presentation Sessions Schedule

Sunday, October 11, 2020 (8:00AM - 10:00AM)
Poster Presentation (Session #1 - Room A)
Innovative Technologies Track

TIME	Poster Title	Presenter
8:10AM	PO20-0006 Analysis of Power Systems Abnormalities, A Case Study Approach	Kai Shraiberg (Wentworth Institute of technology)
8:20AM	PO20-0014 Harnessing the Power of Comparative Functional Genetics: How the Medically Important Enzyme Na ⁺ , K ⁺ -ATPase Can Advance the Treatment of Cardiovascular Diseases	Yi Xie (Massachusetts Institute of Technology)
8:30AM	PO20-0015 Inter-campaign Bias and Data Noise Issues in the ICESat Series	Noah Bergam , Sanskar Agrawal, Lukas Harris, Michael Nguyen, Mihika Sharma (University of Texas at Austin)
8:40AM	PO20-0018 Cane Companion: Leveraging Modern Hardware Tools and Utilizing Deep Learning Methods to Create an Assistance Method for Individuals with Visual Disorders	Neeraj Rattehalli , Ishan Jain (Menlo Atherton High School)
8:50AM	PO20-0021 Optimization of the Temporal Profile of DBS Therapy for Parkinson's Disease	Aidan Riley (University of Connecticut)
9:00AM	PO20-0044 A New Strategy for Effectively Developing clear and concise Asynchronous Virtual Courses	Winter Williams (University of Massachusetts Amherst)
9:10AM	PO20-0045 Bayesian Networks Connecting Processing and Product Features in Additive Manufacturing	Alexander Malmberg (University of Massachusetts Lowell)
9:20AM	PO20-0057 A Novel Approach to Assisting Gene Therapy of Hearing and Balance Loss Using Artificial Intelligence	Connie Jiang , Michelle Chen (Palo Alto High School, Crystal Springs Uplands School)
9:30AM	PO20-0062 High Dimensional Quantum Sampling and Entropic Uncertainty	Keegan Yao (University of Connecticut)
9:40AM	PO20-0063 Evaluating the Impact of Data Offloading in Dense Wireless Networks with Optical Communication	Myles Toole (University of Massachusetts, Boston)
9:50AM - 10:00AM	Session Open for questions for any poster presenters	

Poster Presentation (Session #1 - Room A)

IEEE MIT Undergraduate Research Technology Conference 2020
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Sunday, October 11, 2020 (8:00AM - 10:00AM)
Poster Presentation (Session #1 - Room B)
Machine Learning / Artificial Intelligence (AI)

TIME	Poster Title	Presenter
8:10AM	PO20-0012 Coreference Resolution for Neutralising Gendered Pronouns	Parth Raghav (Reed College)
8:20AM	PO20-0047 Faster Region-Based Convolutional Neural Network for Tumor Localization in Thermograms: A Novel Deep-Learning Based Approach to Breast Cancer Screening	Sadhana Lolla (Massachusetts Institute of Technology)
8:30AM	PO20-0049 A Novel Pupillometric Based Application for the Automated Detection of ADHD Using Machine Learning and Time-series Analysis	William Das, Shubh Khanna (Hunter College High School, Icahn School of Medicine at Mount Sinai)
8:40AM	PO20-0051 Fast Detection of Toxic Emissions Using Deep Neural Network Based Sensing	Ibrahim Bhavnagarwala, Adam Bhavnagarwala (Danbury High School)
8:50AM	PO20-0056 Three Methods to Handle Data Scarcity: Low-Resource NMT of Classical Latin Poetry	Lucas Leary (University of Puget Sound)
9:00AM	PO20-0067 Developing a Computational Model to Diagnose Patients with Dementia	Christina Vu (Union College)
9:10AM - 10:00AM	Session Open for questions for any poster presenters	

Poster Presentation (Session #1 - Room B)

IEEE MIT Undergraduate Research Technology Conference 2020
Poster Presentation Sessions Schedule

Sunday, October 11, 2020 (10:30AM - 12:30PM)
Poster Presentation (Session #2 - Room A)
**Robotics and Controls, Security and Communications, Computer Systems,
Human-Computer Interaction and Graphics Tracks**

TIME	Poster Title	Presenter
10:40AM	PO20-0034 Active Domain Randomization for Robust Control	Qixuan Jin (California Institute of Technology)
10:50AM	PO20-0035 Talk and Roll Bot - Mindcontrol	BingFang Chen (New York City College of Technology)
11:00AM	PO20-0046 Hero-1 Robotic Arm	Joycephine Li (New York City College of Technology)
11:10AM	PO20-0065 Exploring Post Quantum Analog Encryption	Anant Sinha (University of Michigan Ann Arbor)
11:20AM	PO20-0059 Implementation of MPI in A Data-Driven Thermal Simulation Approach for CPUs	Kayla Ruttan (Clarkson University)
11:30AM	PO20-0027 Development of Mobile Applications for Medical Isotope Reference	Vanessa Rodriguez (St. Joseph's College)
11:40AM - 12:30PM	Session Open for questions for any poster presenters	

Poster Presentation (Session #2 - Room A)

IEEE MIT Undergraduate Research Technology Conference 2020
Poster Presentation Sessions Schedule

Sunday, October 11, 2020 (10:30AM - 12:30PM)
Poster Presentation (Session #2 - Room B)
BioEECS and Applied Physics Track,
Circuits, Materials, and Nanotechnologies Track

TIME	Poster Title	Presenter
10:40AM	PO20-0001 LMM-22: An Enhanced Linear Mixed Model (LMM) Approach for Genome-Wide Association Studies (GWAS) for the Prediction of Diseases and Traits among Humans from Genomics Data	Siddharth Sharma (Stanford)
10:50AM	PO20-0037 Development and validation of a melanoma genomic index (MGI) focused on CNVs and AOH from whole-genome SNP aiding in histological assessments of complex melanocytic lesions.	Varun Agarwal
11:00AM	PO20-0048 Simple Retooling of EAGLE CAD for Designing Complex Macro to Micro Fluidic Circuits	Pallavi Balivada (Boston University)
11:10AM	PO20-0050 Demonstration of Doppler Ultrasound Based Innovative Diagnostic Tool for Cancer	Saksham Saksena (Houston High School, University of Memphis)
11:20AM	PO20-0061 SEIZURE DETECTION IN EPILEPSY PATIENTS USING MACHINE LEARNING ALGORITHMS	Aribah Baig, Alessandro Barbiellini Amidei (Foxborough High School, Saint Sebastian's School)
11:30AM	PO20-0070 Multiband Theory of Superconductivity	Joseph Cain (New York University)
11:40AM	PO20-0011 Silk-Derived Highly Dispersed Ni Supported by N-Doped Carbon Nanosheet for Electrochemical CO ₂ Reduction	Shicheng Hu (Massachusetts Institute of Technology)
11:50AM	PO20-0031 E-Cigarette Vapor Vapor Sensor Using Indium Tin Oxide Nanofibers	Alexander Cho (Stevens Institute of Technology)
12:00AM - 12:30PM	Session Open for questions for any poster presenters	

Poster Presentation (Session #2 - Room B)