# IEEE MIT Undergraduate Research Technology Conference 2021 Poster Presentation Sessions Schedule

#### Sunday, October 10, 2021 (9:00AM - 11:00AM)

#### Poster Presentation (Session Room A)

## Machine Learning / Artificial Intelligence (AI) Track Session Moderator: Shulammite Lim

TIME	Poster Title	Presenter			
9:00AM	ID-71 Supervised Binary Convolutional Neural Networks with Model Stacking for Diagnosis of Fundus & Eyelid Diseases	Sirihaasa Nallamothu (University High School)			
9:10AM	ID-73 How Do Deep Neural Nets Compute Optical Flow?	Raphi Kang (Massachusetts Institute of Technology)			
9:20AM	ID-78 Novel Druglikeness Classifier Using Quantum Computing	Rithvik Ganesh (Plano West Senior High School)			
9:30AM	ID-86 FallWatch: A Novel Approach for Through-Wall Fall Detection in Real-Time for the Elderly	Aditya Chebrolu (Independence High School)			
9:40AM	ID-90 Computational Models Recapitulate Key Signatures of Face Processing in the Fusiform Face Area	Alex Abate (Massachusetts Institute of Technology)			
9:50AM	ID-94 L1-Norm Principal Component Analysis via Multiple Bit Flipping	Christie Agbalessi (Rochester Institute of Technology )*; Panos Markopoulos (RIT)			
10:00AM	ID-99 Poster - The Effect Of Data Augmentation on Deep Representations	Phuc H Ngo (Beloit College)			
10:10AM	ID-102 Neural Activity & Visual Stimuli: How the Brain Sees Video	Fatema Tuj Zohura (Northeastern University)			
10:20AM	ID-107 Progresso - Productivity Helper	<b>Tejas Khare</b> (Hillsborough High School, NJ)			
10:30AM - 11:00AM	Session Open for questions for any poster presenters				

### IEEE MIT Undergraduate Research Technology Conference 2021 Poster Presentation Sessions Schedule

#### Sunday, October 10, 2021 (9:00AM - 11:00AM)

Poster Presentation (Session Room B)

# Machine Learning / Artificial Intelligence (AI); Innovation Research Session Moderator: Karen Liberman

Session Moderator. Karen Liberman				
TIME	Poster Title	Presenter		
9:00AM	ID-2 Developing a modified version of Generative Adversarial Network to predict the potential anti-viral drug of COVID-19	Md.Sadek Hossain Asif (Notre Dame College Dhaka)		
9:10AM	ID-109 Latent Space Modeling of Heterochromatin Protein 1 (HP1) Evolution	<b>Abigail M Adams</b> (University of Wisconsin - Stevens Point)		
9:20AM	ID-111 Sentiment Analysis of COVID-19 Social Distancing Tweets	<b>Diwen Zhu</b> (University of Waterloo)		
9:30AM	ID-27 Breakthroughs in Honeybee Health: Continuous-Release Mist Diffusion of Thymol-Based Essential Oils	Kaitlyn N Culbert (Toms River High School North)		
9:40AM	ID-70 Resumary: User-Centered Design and Development of a Mobile App to Build Resume	Sophia L Zhou (Massachusetts Academy of Math and Science at WPI)		
9:50AM	ID-87 Optimizing Naval Power Systems for Transient and Steady-State Conditions	<b>Davis Hobbs</b> (University of South Carolina)		
10:00AM	ID-88 The Implications of State Aggregation for Markov Decision Process Models with Medical Applications	Madeleine M Pollack (Georgia Institute of Technology)		
10:10AM	ID-96 A Tool to Alleviate Perceived Stress in Adolescents	<b>Ashika Srivastava</b> (Chamblee High School)		
10:20AM	ID-101 Optimized Route Planning for the Visually Impaired	Allan Zhang (Ridge High School)		
10:30AM - 11:00AM	Session Open for questions for any poster presenters			

### IEEE MIT Undergraduate Research Technology Conference 2021 Poster Presentation Sessions Schedule

### Sunday, October 10, 2021 (9:00AM - 11:00AM) Poster Presentation (Session Room C)

Biological and Biomedical Engineering (BioEECS); Circuits, Materials, and Nanotechnologies; Robotics and Controls; Security and Communications; Space Application and Technologies Session Moderator: MChelsea Chen

TIME	Poster Title	Presenter
9:00AM	ID-30 LungStat: Improving Lung Cancer Diagnostic Accuracy through Computer Vision	Aditya Rai (Plano West Senior High School); Kaustubh K Sonawane (Plano West Senior High School)
9:10AM	ID-89 ANALYZING COX PROPORTIONAL HAZARDS ASSUMPTION VIOLATIONS IN BREAST CANCER PATIENTS USING TUMOUR mRNA ABUNDANCE DATA	<b>Doyoon Kim</b> (Cleveland High School)
9:20AM	ID-93 Effect of Stroke Deviation on the Aerodynamic Performance of the Smallest Flying Insects	<b>Hrithik Aghav</b> (The University of Arizona)
9:30AM	ID-81 Refocusing Analog Electronic Pedagogy to Emphasize Practical Skill Development within a PSoC Environment	Xavier A Smith (Massachusetts Institute of Technology )
9:40AM	ID-82 A Dry Transfer Technique for Chemical Sensors Based on Two-Dimensional Materials	Melbourne Tang (Massachusetts Institute of Technology)
9:50AM	ID-103 Characterization of large-area superconducting microwires for single-photon detection	Ekaterina Y Arutyunova (Wellesley College)
10:00AM	ID-74 Efficient Ground Vehicle Navigation Using Aerial Images	Jehan Shalabi (Massachusetts Institute of Technology)
10:10AM	ID-105 Outdoor-to-Indoor 28 GHz mmWave Measurements in the COSMOS Testbed Deployment Area	Sienna Brent (Columbia University); Jared Moser (Stuyvesant High School)
10:20AM	ID-97 Investigating the Relationship between Urbanization and Mosquito Hotspots	Ashika Srivastava (Chamblee High School); Uma Desai (El Segundo High School)
10:30AM - 11:00AM	Session Open for questions for any poster presenters	