

## 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	<b>ID-71</b> Supervised Binary Convolutional Neural Networks with Model Stacking for Diagnosis of Fundus & Eyelid Diseases	<b>Sirihaasa Nallamotheu</b> (University High School)
9:10AM	<b>ID-73</b> How Do Deep Neural Nets Compute Optical Flow?	<b>Raphi Kang</b> (Massachusetts Institute of Technology)
9:20AM	<b>ID-78</b> Novel Druglikeness Classifier Using Quantum Computing	<b>Rithvik Ganesh</b> (Plano West Senior High School)
9:30AM	<b>ID-86</b> FallWatch: A Novel Approach for Through-Wall Fall Detection in Real-Time for the Elderly	<b>Aditya Chebrolu</b> (Independence High School)
9:40AM	<b>ID-90</b> Computational Models Recapitulate Key Signatures of Face Processing in the Fusiform Face Area	<b>Alex Abate</b> (Massachusetts Institute of Technology)
9:50AM	<b>ID-94</b> L1-Norm Principal Component Analysis via Multiple Bit Flipping	<b>Christie Agbalessi</b> (Rochester Institute of Technology )
10:00AM	<b>ID-99</b> Poster - The Effect Of Data Augmentation on Deep Representations	<b>Phuc H Ngo</b> (Beloit College)
10:10AM	<b>ID-102</b> Neural Activity & Visual Stimuli: How the Brain Sees Video	<b>Fatema Tuj Zohura</b> (Northeastern University)
10:20AM	<b>ID-107</b> FlowState - Productivity Helper	<b>Tejas Khare</b> (Hillsborough High School, NJ)
10:30AM	<b>ID-11</b> Outfitting a Compact Steel Casting System for Mobile Foundry for Department of Defense (DoD) Rapid Equipping Force (REF)	<b>Joshua Thomas</b> (Worcester Polytechnic Institute)
10:40AM	<b>ID-92</b> Deep Learning Models using Grad-CAM Algorithm and Augmented OCT	<b>Andrew M Romero</b> (CSU Chico: OIIP Lab)
10:50AM - 11:00AM	<b>Session Open for questions for any poster presenters</b>	

**Poster Presentation (Session Room A)**

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<p style="text-align: center;"><b>Sunday, October 10, 2021 (9:00AM - 11:00AM)</b>  <b>Poster Presentation (Session Room B)</b>  <b>Machine Learning / Artificial Intelligence (AI); Innovation Research;</b>  <b>Biological and Biomedical Engineering (BioEECS);</b>  <b>Session Moderator: Qiong Huang</b></p>		
TIME	Poster Title	Presenter
9:00AM	<b>ID-2</b> Developing a modified version of Generative Adversarial Network to predict the potential anti-viral drug of COVID-19	<b>Md.Sadek Hossain Asif</b> (Notre Dame College Dhaka)
9:10AM	<b>ID-109</b> Latent Space Modeling of Heterochromatin Protein 1 (HP1) Evolution	<b>Abigail M Adams</b> (University of Wisconsin - Stevens Point)
9:20AM	<b>ID-111</b> Sentiment Analysis of COVID-19 Social Distancing Tweets	<b>Diwen Zhu</b> (University of Waterloo)
9:30AM	<b>ID-27</b> Breakthroughs in Honeybee Health: Continuous-Release Mist Diffusion of Thymol-Based Essential Oils	<b>Kaitlyn N Culbert</b> (Toms River High School North)
9:40AM	<b>ID-70</b> Resumary: User-Centered Design and Development of a Mobile App to Build Resume	<b>Sophia L Zhou</b> (Massachusetts Academy of Math and Science at WPI)
9:50AM	<b>ID-87</b> Optimizing Naval Power Systems for Transient and Steady-State Conditions	<b>Davis Hobbs</b> (University of South Carolina)
10:00AM	<b>ID-88</b> The Implications of State Aggregation for Markov Decision Process Models with Medical Applications	<b>Madeleine M Pollack</b> (Georgia Institute of Technology)
10:10AM	<b>ID-96</b> A Tool to Alleviate Perceived Stress in Adolescents	<b>Ashika Srivastava</b> (Chamblee High School)
10:20AM	<b>ID-101</b> Optimized Route Planning for the Visually Impaired	<b>Allan Zhang</b> (Ridge High School)
10:30AM	<b>ID-113</b> Improving Control of Upper Extremity Orthoses with Limb Trajectory Prediction	<b>Mustafa Mohammed</b> (University of Illinois at Chicago)
10:40AM - 11:00AM	Session Open for questions for any poster presenters	

**Poster Presentation (Session Room B)**

IEEE MIT Undergraduate Research Technology Conference 2021  
Poster Presentation Sessions Schedule

<p style="text-align: center;"><b>Sunday, October 10, 2021 (9:00AM - 11:00AM)</b>  <b>Poster Presentation (Session Room C)</b>  <b>Biological and Biomedical Engineering (BioEECS); Circuits, Materials, and Nanotechnologies;</b>  <b>Robotics and Controls; Security and Communications; Space Application and Technologies</b>  <b>Session Moderator: Chelsea Chen</b></p>		
TIME	Poster Title	Presenter
9:00AM	<b>ID-30</b> LungStat: Improving Lung Cancer Diagnostic Accuracy through Computer Vision	<b>Aditya Rai</b> (Plano West Senior High School); <b>Kaustubh K Sonawane</b> (Plano West Senior High School)
9:10AM	<b>ID-89</b> ANALYZING COX PROPORTIONAL HAZARDS ASSUMPTION VIOLATIONS IN BREAST CANCER PATIENTS USING TUMOUR mRNA ABUNDANCE DATA	<b>Doyoon Kim</b> (Cleveland High School)
9:20AM	<b>ID-93</b> Effect of Stroke Deviation on the Aerodynamic Performance of the Smallest Flying Insects	<b>Hrithik Aghav</b> (The University of Arizona)
9:30AM	<b>ID-81</b> Refocusing Analog Electronic Pedagogy to Emphasize Practical Skill Development within a PSoC Environment	<b>Xavier A Smith</b> (Massachusetts Institute of Technology )
9:40AM	<b>ID-82</b> A Dry Transfer Technique for Chemical Sensors Based on Two-Dimensional Materials	<b>Melbourne Tang</b> (Massachusetts Institute of Technology)
9:50AM	<b>ID-103</b> Characterization of large-area superconducting microwires for single-photon detection	<b>Ekaterina Y Arutyunova</b> (Wellesley College)
10:00AM	<b>ID-74</b> Efficient Ground Vehicle Navigation Using Aerial Images	<b>Jehan Shalabi</b> (Massachusetts Institute of Technology)
10:10AM	<b>ID-105</b> Outdoor-to-Indoor 28 GHz mmWave Measurements in the COSMOS Testbed Deployment Area	<b>Sienna Brent</b> (Columbia University); <b>Jared Moser</b> (Stuyvesant High School)
10:20AM	<b>ID-97</b> Investigating the Relationship between Urbanization and Mosquito Hotspots	<b>Ashika Srivastava</b> (Chamblee High School); <b>Uma Desai</b> (El Segundo High School)
10:30AM	<b>ID-75</b> A Game Theoretical Authentication Approach Towards Trustworthy Outsourced Deep Neural Networks	<b>Louay Ahmad</b> (Montclair State University)
10:40AM - 11:00AM	Session Open for questions for any poster presenters	

**Poster Presentation (Session Room C)**