

IEEE MIT Undergraduate Research Technology Conference 2022  
Lightning Talks Schedule



**Sunday, October 2, 2022**  
**Stata Center 32-123 (Lightning Talks Schedule)**  
**Session Chair: Bruce Hecht**

TIME	TITLE	AUTHORS / SPEAKERS	Technical Track
11:30AM	<b>ID-3 PAPER (VIRTUAL): 10min</b> Eye-Net: An Interpretable Machine Learning Ensemble for Feature Engineering, Classification, and Lesion Localization of Diabetic Retinopathy	<b>Justin Liu</b> (Palos Verdes Peninsula High School)	Machine Learning / Artificial Intelligence (AI)
11:40AM	<b>ID-4 PAPER (VIRTUAL): 10min</b> A Natural Language Processing and Machine Learning-Based Framework to Automatically Identify Cyberbullying and Hate Speech in Real-Time	<b>Samyak Shrimali</b> (Jesuit High School)	Machine Learning / Artificial Intelligence (AI)
11:50AM	<b>ID-156 (VIRTUAL):</b> Utilizing Machine Learning techniques to explain the role of Primary Cilia in Aging and Alzheimer's Disease	<b>Aneesh Mazumder</b> (University of North Texas)	Biological and Biomedical Engineering (BioEECS)
11:55AM			
12:00PM	<b>ID-90:</b> Harnessing Instabilities during Frontal Polymerization for Patterning	<b>Aarav Seth</b> (University of Illinois)	Circuits, Materials, and Nanotechnologies
12:05PM	<b>ID-119:</b> Analyzing the Thermal Capturing Properties and Performance of PCM in Automobile Roofs for Interior Temperature Regulation	<b>Pranav S Manikonda</b> (Manalapan High School)	Circuits, Materials, and Nanotechnologies
12:10PM	<b>ID-127:</b> Melanoma Detection and Classification using Machine Learning Algorithms	<b>Pranav S Manikonda</b> (Manalapan High School)	Machine Learning / Artificial Intelligence (AI)
12:15PM	<b>ID-132:</b> AI-WAMP: An Industrial Workplace Alerting and Monitoring Platform to Prevent Workplace Injury and Accidents	<b>Sanjay Adhikesaven</b> (Foothill High School)	Machine Learning / Artificial Intelligence (AI)
12:20PM	<b>ID-135:</b> Genetic Screen for Age Reversal in Neurons	<b>Carol Magalhaes</b> (Church Lab)	Biological and Biomedical Engineering (BioEECS)
12:25PM	<b>ID-139:</b> At the Forefront of a Scientific Breakthrough - Experiments and Paradoxes	<b>Alexei Korolev</b> (Morris County School of Technology)	Innovation Research