

2022 Grand Award Winners

Division	Category	StudentNames	ProjectTitle	SchoolName
Junior	Engineering Grand Award	Tavishi Sinha	Finding a Sustainable Carbon Sequestration Solution Through Growing Algae on Hydroponic Surfaces	QUAIL VALLEY MIDDLE SCHOOL
Junior	Life Science Grand Award	Charlie Tran, Ella Whiteside	What Method of Washing Strawberries Will Leave the Least Pesticides on the Strawberry?	FRIENDSWOOD JUNIOR HIGH SCHOOL
Junior	Physical Science Grand Award	Sai Balaji	Which Fruit has the highest amount of Vitamin C? (Organic and Non-Organic Fruits)	KNOX JUNIOR HIGH SCHOOL
Senior	Engineering Grand Award	Mahi Patel, Felipe Aceves	From Space to Horizon: Improving Efficiency and Modeling the Future of Ion Thrusters	ACADEMY OF SCIENCE AND TECHNOLOGY
Senior	Engineering Grand Award	Ada Wang, Olivia Ye	Sea it to Believe it: Machine Learning-Based Prediction of Harmful Algal Bloom (HAB) Intensity	ACADEMY OF SCIENCE AND TECHNOLOGY
Senior	Engineering Grand Award	Sohi Patel	Programmable Matter: A Microscale, Self-Reconfigurable, Modular Robotic Metamaterial	ACADEMY OF SCIENCE AND TECHNOLOGY
Senior	Engineering Grand Award	Abigail Hindman	What Are The Odds? Designing and Building a Machine to Flip Coins with a Predictable Outcome	ST. JOHN'S SCHOOL H S
Senior	Life Science Grand Award	Aarushi Pandey	Measuring the Effects of Varying Light Intensities on Hydroponically Grown Plants	ACADEMY OF SCIENCE AND TECHNOLOGY
Senior	Life Science Grand Award	Sanskriti Manoharan	Use of Bio-Electrical Impedance Analysis to detect changes in Bone Density indicative of Osteoporosis	HIGHTOWER HIGH SCHOOL
Senior	Life Science Grand Award	Siddhanth Pachipala	SuiSensor: A Novel, Low-Cost Machine Learning System for the Early Detection and Tracking of Suicidal Ideation via Computational Linguistics	ACADEMY OF SCIENCE AND TECHNOLOGY
Senior	Life Science Grand Award	Zaina Siddiqi, Rotem Ris	Year III: Optimizing the Bioavailability of Curcumin in Dugesia tigrina as a Model to Mitigate the Negative Effects of Radiotherapy	ACADEMY OF SCIENCE AND TECHNOLOGY
Senior	Physical Science Grand Award	Sanuja Manage	Random Forest to Predict Dengue Cases and Outbreaks	ACADEMY OF SCIENCE AND TECHNOLOGY
Senior	Physical Science Grand Award	Madelyn Puza, Shivani Mundra	Engineering a Sustainable and Inexpensive Cellulose Battery Cell	ACADEMY OF SCIENCE AND TECHNOLOGY
Senior	Physical Science Grand Award	Ricardo Victorio	Designing a Soft Robotic Solar Tracker to Increase the Solar Panel Efficiency	ACADEMY OF SCIENCE AND TECHNOLOGY
Senior	Physical Science Grand Award	Emmy Li	Enhanced CO2 Capture via Carbon Mineralization	CLEAR LAKE HIGH SCHOOL