

## 2022 Place Award Winners

Award	Division	Category	StudentNames	ProjectTitle	SchoolName
1st Place	Junior	Aerospace Engineering	Sebastian Woods	Birdie Rocket Rodeo	SEABROOK INTERMEDIATE
1st Place	Junior	Animal Sciences	Brayden Dodd	The Effect of Plants on Roaches	BROOKSIDE INTERMEDIATE SCHOOL
1st Place	Junior	Behavioral and Social Sciences	Madison Mooney	Prism Plasticity	ST. CLARE OF ASSISI CATHOLIC SCHOOL
1st Place	Junior	Biochemistry and Microbiology	Charlie Tran, Ella Whiteside	What Method of Washing Strawberries Will Leave the Least Pesticides on the Strawberry?	FRIENDSWOOD JUNIOR HIGH SCHOOL
1st Place	Junior	Biomedical Engineering	Lucille Lopez	Do Liquids Change Our Fingerprints?	Baylor College of Medicine Biotech Academy at Rusk MS
1st Place	Junior	Chemical Engineering and Materials Science	Lekisha Nagpal	Synthesizing a Natural Effective Ultraviolet Blocking Sunscreen through the Testing of Ultraviolet Detecting Methods	YORK JUNIOR HIGH SCHOOL
1st Place	Junior	Chemistry	Sai Balaji	Which Fruit has the highest amount of Vitamin C? (Organic and Non-Organic Fruits)	KNOX JUNIOR HIGH SCHOOL
1st Place	Junior	Earth and Environmental Sciences	Jordan Trinta	pHun In the Sun	SEABROOK INTERMEDIATE
1st Place	Junior	Embedded Systems	Aayush Jetly	An Affordable, Machine-learning Aided Computer Application for Detecting Prolonged Dampness in Hard to Access Areas of the House.	FRIENDSWOOD JUNIOR HIGH SCHOOL
1st Place	Junior	Energy and Transportation	Tyler Harvey	Power On	SEABROOK INTERMEDIATE
1st Place	Junior	Engineering Mechanics	Daniela Aburto Perez	A Light Amidst The Storm	MCCULLOUGH JUNIOR HIGH SCHOOL
1st Place	Junior	Environmental Engineering	Tavishi Sinha	Finding a Sustainable Carbon Sequestration Solution Through Growing Algae on Hydroponic Surfaces	QUAIL VALLEY MIDDLE SCHOOL
1st Place	Junior	Mathematics	Eshan Jolly	A Texas County-wise Analysis of Correlating Cancer Mortalities with Income Inequalities	Creekside Park Junior High School
1st Place	Junior	Medicine and Health	Sanjan Sarang	Testing the impact of food ingredients, consumer products and their packaging on the human endocrine system.	MCCULLOUGH JUNIOR HIGH SCHOOL
1st Place	Junior	Physics and Astronomy	Anna Longacre	The effect of spray nozzle size on pool temperature	BROOKSIDE INTERMEDIATE SCHOOL
1st Place	Junior	Plant Sciences	Andres Rodriguez	The effect of different Hydroponic Designs on the growth of Lettuce	BAYSIDE INTERMEDIATE SCHOOL
1st Place	Junior	Robotics and Intelligent Machines	Shri Chada	Understanding Public Perceptions During the Pandemic Using Sentiment Analysis on COVID-19 Related Tweets	Chada Home School - MS
1st Place	Junior	Systems Software	Aanya Singh, Medha Menon	Finding the Best Renewable Resource using Regression Models	QUAIL VALLEY MIDDLE SCHOOL
1st Place	Senior	Aerospace Engineering	Mahi Patel, Felipe Aceves	From Space to Horizon: Improving Efficiency and Modeling the Future of Ion Thrusters	ACADEMY OF SCIENCE AND TECHNOLOGY
1st Place	Senior	Animal Sciences	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

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1st Place	Senior	Behavioral and Social Sciences	Siddhant 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
1st Place	Senior	Biochemistry and Microbiology	Felix Li, Caleb Chan, Kevin Gong	Developing a Novel Method to Achieve Targeted Sustained Release of a Biocidal Agent on Surfaces Through Inactivated Cell Reservoirs for Persistent Disinfection Application	ACADEMY OF SCIENCE AND TECHNOLOGY
1st Place	Senior	Biomedical Engineering	Rohan Mehta, Roshan Mehta, Shreyas Vatts	DiaVest: A Non-Invasive System Wearable System for the Monitoring and Prediction of Blood-Glucose and Heart-Related Complications in Diabetics	ACADEMY OF SCIENCE AND TECHNOLOGY
1st Place	Senior	Chemical Engineering and Materials Science	Sohi Patel	Programmable Matter: A Microscale, Self-Reconfigurable, Modular Robotic Metamaterial	ACADEMY OF SCIENCE AND TECHNOLOGY
1st Place	Senior	Chemistry	Madelyn Puza, Shivani Mundra	Engineering a Sustainable and Inexpensive Cellulose Battery Cell	ACADEMY OF SCIENCE AND TECHNOLOGY
1st Place	Senior	Earth and Environmental Sciences	Emmy Li	Enhanced CO2 Capture via Carbon Mineralization	CLEAR LAKE HIGH SCHOOL
1st Place	Senior	Embedded Systems	Inu Baek	A Novel Flood Level Monitoring System	ACADEMY OF SCIENCE AND TECHNOLOGY
1st Place	Senior	Energy and Transportation	Ricardo Victorio	Designing a Soft Robotic Solar Tracker to Increase the Solar Panel Efficiency	ACADEMY OF SCIENCE AND TECHNOLOGY
1st Place	Senior	Engineering Mechanics	Abigail Hindman	What Are The Odds? Designing and Building a Machine to Flip Coins with a Predictable Outcome	ST. JOHN'S SCHOOL H S
1st Place	Senior	Environmental Engineering	Ada Wang, Olivia Ye	Sea it to Believe it: Machine Learning-Based Prediction of Harmful Algal Bloom (HAB) Intensity	ACADEMY OF SCIENCE AND TECHNOLOGY
1st Place	Senior	Mathematics	Sanuja Manage	Random Forest to Predict Dengue Cases and Outbreaks	ACADEMY OF SCIENCE AND TECHNOLOGY
1st Place	Senior	Medicine and Health	Sanskriti Manoharan	Use of Bio-Electrical Impedance Analysis to detect changes in Bone Density indicative of Osteoporosis	HIGHTOWER HIGH SCHOOL
1st Place	Senior	Physics and Astronomy	Mariana Oyervides Salas	Finding which Orchestra instrument's sound quality is the most affected by temperature	ACADEMY FOR SCIENCE AND HEALTH PROFESSIONS
1st Place	Senior	Plant Sciences	Aarushi Pandey	Measuring the Effects of Varying Light Intensities on Hydroponically Grown Plants	ACADEMY OF SCIENCE AND TECHNOLOGY
1st Place	Senior	Robotics and Intelligent Machines	Saket Bala	Glio-No-Mo: The Development of a Novel Time and Cost Effective Method for Early Detection of Glioblastoma Tumors via Machine Learning Analysis of Ophthalmoscope Readings	ACADEMY OF SCIENCE AND TECHNOLOGY
1st Place	Senior	Systems Software	Ruihan Ma, Dawson Zhang, Grace Yuan	Simulating The Transmission of Viruses	ACADEMY OF SCIENCE AND TECHNOLOGY
2nd Place	Junior	Aerospace Engineering	Rio Rivas	Aerodynamic Improvements	MCCULLOUGH JUNIOR HIGH SCHOOL
2nd Place	Junior	Animal Sciences	Lola Miller	Trapped	MCCULLOUGH JUNIOR HIGH SCHOOL
2nd Place	Junior	Behavioral and Social Sciences	Francisco Novoa	A Pre-Text to Crash	ST. CLARE OF ASSISI CATHOLIC SCHOOL
2nd Place	Junior	Biochemistry and Microbiology	Cara Anderson	Effects of Probiotics on Zoonothellae under Heat Stress	SEABROOK INTERMEDIATE

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2nd Place	Junior	Biomedical Engineering	Nevaeh Carrasco	prosthetic hand	Twin Creeks Middle School
2nd Place	Junior	Chemical Engineering and Materials Science	Avery McGee	Don't Raise the Roof	SEABROOK INTERMEDIATE
2nd Place	Junior	Chemistry	Addison Binford	How Sweet It Is!: Tea Tester	PEET JUNIOR HIGH SCHOOL
2nd Place	Junior	Earth and Environmental Sciences	Rhea Chidambaram	Megoo (Most Efficient Generator Of Oxygen)	Spring Branch Academic Institute MS
2nd Place	Junior	Energy and Transportation	Aniket Chakraborty	The Effect of Wheel Size On a Car's Speed	KNOX JUNIOR HIGH SCHOOL
2nd Place	Junior	Engineering Mechanics	Kean Ebert	Art Bots in Action: Effect of Body Height on Stability	W-3 Christian Academy
2nd Place	Junior	Environmental Engineering	Isabel Rosas	Solar energy in Hydroelectric Plants	YORK JUNIOR HIGH SCHOOL
2nd Place	Junior	Mathematics	Audrey Tremont	Does A Baseball Formula Apply To Softball	SEABROOK INTERMEDIATE
2nd Place	Junior	Medicine and Health	Aman Wairkar	Comparing the effectiveness of chamomile and passionflower herbal tea in inducing sleep	LEAGUE CITY INTERMEDIATE SCHOOL
2nd Place	Junior	Physics and Astronomy	Sebastian Morejon	What's That Racket	ST. CLARE OF ASSISI CATHOLIC SCHOOL
2nd Place	Junior	Plant Sciences	Berlin Rosenbaum	FREEZE!	SEABROOK INTERMEDIATE
2nd Place	Junior	Robotics and Intelligent Machines	Shaivi Moparthi	PinkRibbon: A Novel Method for Breast Cancer Detection using Machine Learning and Convolutional Neural Networks	The Kinkaid School MS
2nd Place	Junior	Systems Software	Ishan Pendyala	Determining What Facial Feature is Most Similar Between Parent and Child	FRIENDSWOOD JUNIOR HIGH SCHOOL
2nd Place	Senior	Aerospace Engineering	Rebecca Garza	Utilizing Swept Wing Aircraft Technology to Design Planes With a Stable Longitudal Axis After Exposed to Turbulence	ACADEMY OF SCIENCE AND TECHNOLOGY
2nd Place	Senior	Animal Sciences	Trisha Sharma	A Novel Application of BioSec Sanitizer to Viral Disinfection for Optimization of Swine Farming Practices	ACADEMY OF SCIENCE AND TECHNOLOGY
2nd Place	Senior	Behavioral and Social Sciences	Pranav Somani	NeuroCare: A Novel Mixed Reality and Machine Learning-Based Diagnostic and Assistive Tool for Neurodegenerative Diseases	ACADEMY OF SCIENCE AND TECHNOLOGY
2nd Place	Senior	Biochemistry and Microbiology	Patrick McKenna	Utilizing Antibodies as an Alternative Method for the Identification of Vibrio Cholerae	ACADEMY OF SCIENCE AND TECHNOLOGY
2nd Place	Senior	Biomedical Engineering	Anushka Aggarwal, Madison Burke	Using AI to Detect Morphological Abnormalities of Leukocytes to Diagnose Leukemia	Dulles HS
2nd Place	Senior	Chemical Engineering and Materials Science	Raj Mhetar	Evaluation of Natural & Edible Coatings to Extend Shelf Life of Fruits	ACADEMY OF SCIENCE AND TECHNOLOGY
2nd Place	Senior	Chemistry	Sophia Perone	Different Candle Wicks' Burn Times	ACADEMY FOR SCIENCE AND HEALTH PROFESSIONS

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2nd Place	Senior	Earth and Environmental Sciences	Zoe Yu	A Classification Method of Synthetic Fibers for Automated Textile Recycling via Raman Spectroscopy	ACADEMY OF SCIENCE AND TECHNOLOGY
2nd Place	Senior	Embedded Systems	Rohit Pillutla	Engineering a Cost-Effective, Sensor-Based Early Wildfire Detection System	ACADEMY OF SCIENCE AND TECHNOLOGY
2nd Place	Senior	Energy and Transportation	Henry Aceves	Designing and Constructing a Wave Energy Converter Supported by a Rigid Exterior Support Structure with a <u>Simplistic Energy Conversion System Utilizing a Voltage</u>	ACADEMY OF SCIENCE AND TECHNOLOGY
2nd Place	Senior	Engineering Mechanics	Alisa Noro	Engineering and Simulating Mitigation Techniques for the Kauai and Niihau Islands	ACADEMY OF SCIENCE AND TECHNOLOGY
2nd Place	Senior	Environmental Engineering	Connor Deng	Development of a Membraneless Desalination Apparatus Utilizing Electrostatic Ion Drift	ACADEMY OF SCIENCE AND TECHNOLOGY
2nd Place	Senior	Mathematics	Daniel Cheung	Tower of Hanoi Variations: Four Poles	Seven Lakes High School
2nd Place	Senior	Medicine and Health	Joseph Zhang, Henry Zhao	3D Hydrogel of Rejuvenized Decellularized Adipose Tissue for Chronic Wound Healing	CLEAR LAKE HIGH SCHOOL
2nd Place	Senior	Physics and Astronomy	Chris Creedon	Baseball's Standard Bounce vs Temperature	CLEAR CREEK HIGH SCHOOL
2nd Place	Senior	Plant Sciences	Katie Yan	Optimal Microneedle Cross-Sectional Shape for Plant DNA Extraction	ACADEMY OF SCIENCE AND TECHNOLOGY
2nd Place	Senior	Robotics and Intelligent Machines	Allen Shen	Simulation of Abnormal Crouch Gait and Development of a Torque-Additive Technique for Rehabilitation	CLEAR LAKE HIGH SCHOOL
2nd Place	Senior	Systems Software	Mihir Relan, Yash Semrani	Generalized Seizure Detection Algorithm	DEBAKEY HIGH SCHOOL FOR HEALTH PROFESSIONS
3rd Place	Junior	Aerospace Engineering	Owen Ripps	Lunar Dust Seals for Moon Boot	SEABROOK INTERMEDIATE
3rd Place	Junior	Animal Sciences	Iris Shen	Comparing the Effectiveness of Freshwater and Marine Mussels in Detecting Traces of Copper Sulfate in Water	MCCULLOUGH JUNIOR HIGH SCHOOL
3rd Place	Junior	Behavioral and Social Sciences	Rahmatoulie Lopyy	The Effects Of Tone	Baylor College of Medicine Biotech Academy at Rusk MS
3rd Place	Junior	Biochemistry and Microbiology	Maya Govindaraj, Arjun Govindaraj, Lakshanya Solipuram	Do Spices Have Power to Prevent Food Spoilage?	THE HONOR ROLL SCHOOL
3rd Place	Junior	Biomedical Engineering	Cayson Wang	The Taller, the Faster?	The John Cooper School M S
3rd Place	Junior	Chemical Engineering and Materials Science	Sahana Gokul, Mehal Shelare, Amanda Jerng	Best material to capture carbon dioxide	QUAIL VALLEY MIDDLE SCHOOL
3rd Place	Junior	Chemistry	Jay Holliday	Molecular density in balls.	PEET JUNIOR HIGH SCHOOL
3rd Place	Junior	Earth and Environmental Sciences	Ayush Patel	Coagulation and Flocculation	YORK JUNIOR HIGH SCHOOL
3rd Place	Junior	Energy and Transportation	Matthew Banker	How Aerodynamic are these shapes?	MCCULLOUGH JUNIOR HIGH SCHOOL

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3rd Place	Junior	Engineering Mechanics	Siddharth Jain	The Strength of 3D Printing Infill	MCCULLOUGH JUNIOR HIGH SCHOOL
3rd Place	Junior	Environmental Engineering	Shiv Patel, Priyadarsan Aravinthkumar, Ved Nekkallapudi	Beach Rover	Grand Lakes Junior High
3rd Place	Junior	Mathematics	Taylor Cole	The effect of COVID symptoms on the prediction of multiple respiratory viruses, and the incidence of multiple respiratory viruses in people obtaining a COVID -19 test.	BROOKSIDE INTERMEDIATE SCHOOL
3rd Place	Junior	Medicine and Health	Nia Shetty	Impact of COVID-19 Vaccines	THE HONOR ROLL SCHOOL
3rd Place	Junior	Physics and Astronomy	Krishaa Jani	Effect of temperature on color of stars	FORT SETTLEMENT MIDDLE SCHOOL
3rd Place	Junior	Plant Sciences	Jackson Swords	Using Mars Simulant Regolith to Grow Plants: What Will We Eat on Mars?	SARTARTIA MIDDLE SCHOOL
3rd Place	Junior	Robotics and Intelligent Machines	Rayhan Pappar	Building a Distress Detector Using NLP and Computer Vision	MCCULLOUGH JUNIOR HIGH SCHOOL
3rd Place	Junior	Systems Software	Karis Gill	Creating a Device that Measures and Displays a Plant's Temperature	BROOKSIDE INTERMEDIATE SCHOOL
3rd Place	Senior	Aerospace Engineering	Mykah Santiago, Surae Lofton	Don't Be a Drag!	ACADEMY FOR SCIENCE AND HEALTH PROFESSIONS
3rd Place	Senior	Animal Sciences	Samantha Bolla, Andrea Diaz	Do tortoises prefer the color or smell of their food?	ACADEMY FOR SCIENCE AND HEALTH PROFESSIONS
3rd Place	Senior	Behavioral and Social Sciences	Vicky Nguyen	Implicit Association Towards Cancer Patients with Chemotherapy Induced Alopecia	CLEAR BROOK HIGH SCHOOL
3rd Place	Senior	Biochemistry and Microbiology	Aditi Kumari	Identification and Analysis of Molecular Pathways and Key Candidate Biomarkers in Glioblastoma Multiforme	Dulles HS
3rd Place	Senior	Biomedical Engineering	Ganesh Venu	Developing a Cost-Effective Assistive Visual Aid for Retinitis Pigmentosa Patients to Identify Objects Utilizing Real-Time Object Detection and Voice Feedback	FRIENDSWOOD HIGH SCHOOL
3rd Place	Senior	Chemical Engineering and Materials Science	Kaitlin Horacefield	What is the best sound frequency to extinguish a flame the quickest?	CLEAR BROOK HIGH SCHOOL
3rd Place	Senior	Chemistry	Bianca Pethe, Ananya Iyer	The Dilemma of Dyeing: Testing the Mutagenicity of Hair Dye Through a Genotoxicity Assay	ACADEMY OF SCIENCE AND TECHNOLOGY
3rd Place	Senior	Earth and Environmental Sciences	Shriya Balasubramaniam	Finding The Best Eco-Friendly Plant Fiber-Based Textile Alternative to Polyester Material	ACADEMY OF SCIENCE AND TECHNOLOGY
3rd Place	Senior	Energy and Transportation	Sanjiv Anand	The Urban Windmill	ACADEMY OF SCIENCE AND TECHNOLOGY
3rd Place	Senior	Engineering Mechanics	Ved Ganesh	Stable Shores: An Experimental Set-Up to Optimize Parameters for Coastal Erosion Control Structures	Dulles HS
3rd Place	Senior	Environmental Engineering	Jessica Wang, Selina Song	Bricks Created from Reused Paper-based Materials	ACADEMY OF SCIENCE AND TECHNOLOGY
3rd Place	Senior	Mathematics	Abhishek Tripathi	An Analysis of Benford's Law and Multiple Factors in Determining the Significance of COVID-19 Reports Utilizing Multivariable Linear Regression	ACADEMY OF SCIENCE AND TECHNOLOGY

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3rd Place	Senior	Medicine and Health	Isabella Oraska	Oral Solid Dosage Form Effectiveness on Patients with Gastrointestinal Diseases	HIGHTOWER HIGH SCHOOL
3rd Place	Senior	Physics and Astronomy	Jesse Miller	Investigating Electromagnetic Induction For Transportation	ACADEMY OF SCIENCE AND TECHNOLOGY
3rd Place	Senior	Plant Sciences	Grace Zhang	Effectiveness of Cross-Linked Polyacrylamide Absorbent Polymers on Soil Moisture Retention and Plant Growth	ACADEMY OF SCIENCE AND TECHNOLOGY
3rd Place	Senior	Robotics and Intelligent Machines	Colin Shen, Jason Nguyen	Autonomous Search-and-Rescue Drone using Machine Learning	CLEAR LAKE HIGH SCHOOL
3rd Place	Senior	Systems Software	Jaanak Prashar	Dosimetry Effects of Radiation on White Blood Cells: Investigating How Protons Impact Granulocytes, Agranulocytes and Plasmids using Monte Carlo Techniques	Jordan High School
Honorable Mention	Junior	Animal Sciences	Titus Puetz	What is the best lure for bass fishing	All Nations Community School
Honorable Mention	Junior	Behavioral and Social Sciences	Aditi Venkataraman	The effect of ethnic proximity on the ability to differentiate between real and computer-generated faces	MCCULLOUGH JUNIOR HIGH SCHOOL
Honorable Mention	Junior	Biochemistry and Microbiology	Vibhan Emmi	Happy Neighbor	MCCULLOUGH JUNIOR HIGH SCHOOL
Honorable Mention	Junior	Chemical Engineering and Materials Science	Naomi Chelius, Georgia Stefanides	Fabric vs Fire	EMERY WEINER JEWISH SCHOOL
Honorable Mention	Junior	Chemistry	Sonia Modi, SaiSpoorthi Maram	H2O 2 U	QUAIL VALLEY MIDDLE SCHOOL
Honorable Mention	Junior	Earth and Environmental Sciences	Briley Grimm	Shipwrecks and Sand and Metal...OH MY!	SEABROOK INTERMEDIATE
Honorable Mention	Junior	Energy and Transportation	Izabella Frankfort	Effect of different high fat solutions in a citrus recycled 3D charging block.	BROOKSIDE INTERMEDIATE SCHOOL
Honorable Mention	Junior	Engineering Mechanics	Emina Erdal	Access it All: an Engineered Solution to Inclusive Playgrounds	Harmony School of Excellence - MS Sugar Land
Honorable Mention	Junior	Environmental Engineering	Dylan Goldman	Melting Plastic Bags to Save the Environment	KNOX JUNIOR HIGH SCHOOL
Honorable Mention	Junior	Medicine and Health	Charlotte Leijnse	What drink works best for an athlete's recovery?	KNOX JUNIOR HIGH SCHOOL
Honorable Mention	Junior	Physics and Astronomy	Vikram Gupta	Cold Vs. Hot Tennis Balls	FRIENDSWOOD JUNIOR HIGH SCHOOL
Honorable Mention	Junior	Robotics and Intelligent Machines	Sriram Susarla	AI Recycles	THE HONOR ROLL SCHOOL
Honorable Mention	Senior	Aerospace Engineering	Rhea Wadhwa	Determining the Differences in Altitude and Thrust of a Hybrid Rocket Engine in Comparison to a Solid Propellant Rocket Engine.	CLEAR LAKE HIGH SCHOOL
Honorable Mention	Senior	Behavioral and Social Sciences	Sreeja Tipirneni	The Effect of Emotion Recognition on Memory	FRIENDSWOOD HIGH SCHOOL
Honorable Mention	Senior	Biochemistry and Microbiology	Neha Anurag	The Effect of High Glucose on Reproduction in Drosophila Melanogaster (fruit fly)	RIDGE POINT HIGH SCHOOL

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Honorable Mention	Senior	Biomedical Engineering	Huri Kose	Finding CAzymes in the Milky White Mushroom	Harmony Science Academy Houston
Honorable Mention	Senior	Chemical Engineering and Materials Science	Mia Palacios, John Duong	Effects of Different Ratios of Sodium Polyacrylate, Sawdust, Clay, and Sand on Water Retention Rates	Eisenhower HS
Honorable Mention	Senior	Chemistry	Nursel Eski	Discovering potential inhibitors of the $\alpha$ -amylase enzyme using molecular docking	Harmony School Of Innovation - HS Katy
Honorable Mention	Senior	Earth and Environmental Sciences	Victoria Ou	Solving the Freshwater Crisis: Investigating the Effects of Temperature on Freezing Stages in Freeze Desalination	ACADEMY OF SCIENCE AND TECHNOLOGY
Honorable Mention	Senior	Energy and Transportation	Nikita DSouza	Residential Home Insulation Efficiency	ACADEMY OF SCIENCE AND TECHNOLOGY
Honorable Mention	Senior	Engineering Mechanics	Jessica Bird	Instrumented Walking Cane for the Visually Impaired	ACADEMY OF SCIENCE AND TECHNOLOGY
Honorable Mention	Senior	Environmental Engineering	Matthew Yu	Removal of Perfluorooctanoic Acid in Drinking Water by Metal-Organic Frameworks	ACADEMY OF SCIENCE AND TECHNOLOGY
Honorable Mention	Senior	Mathematics	Roshni Chikhlwala	Comparison of the Normalized Surface Area of Red and Russet Potato Tubers	CLEAR CREEK HIGH SCHOOL
Honorable Mention	Senior	Medicine and Health	Varun Balaji	Combination of Melatonin & Blue Light Filter to Counter Detrimental Health Effects of Constant Light	CLEAR LAKE HIGH SCHOOL
Honorable Mention	Senior	Robotics and Intelligent Machines	Vali Khan	Reliable AI-Based Detection of Obstructive Sleep Apnea through an Intelligent Smart Watch Application	ACADEMY OF SCIENCE AND TECHNOLOGY