

Behavioral and Social Sciences

BE-001	The Effect Of Lemon Oil Scent On Long-Term Word List Memory of High School Students	Second Place
BE-006	Does Listening to Music Have an Effect on Short-Term Memory?	
BE-009	A Qualitative Analysis of Factors Affecting Mental Health in Competitive Rhythmic Gymnastics	
BE-011	Decoding the Dialogue: Influences of Verbal and Nonverbal Cues on Perception	Third Place
BE-013	Affect of Music on Mood	
BE-015	Reclaiming Conversation: How Often Do We Substitute Phone-Based Communication For Face-To-Face Conversation?	
BE-016	Musical Moods	
BE-017	The Truth Behind Food Date Labels	Second Place
BE-028	San Francisco's Rental Market: Identifying, Analyzing, and Quantifying Trends in Eviction and Rent Control	
BE-070	Are fencing referees biased in favor of fencers from their own region?	First Place
BE-074	Can You Outsmart The Mandela Effect?	Second Place
BE-089	Music Memory	Second Place
BE-090	Do I Stress You Out?	Second Place
BE-096	The Relationship Between Sugar-Sweetened Beverages and Obesity in a Diverse US Population Sample	Third Place
BE-104	GPT vs. YOU	Third Place
BE-107	Red Light Green Light	Second Place
BE-112	Leveraging AI Voices for Improvement	First Place
BE-120	Age-Specific Language Markers of Depression via Social Media	Second Place
BE-124	Emotional Carnage	First Place
BE-125	"The Unfair Game"	Third Place
BE-128	Prize or Punishment	Third Place
BE-135	Does Age Affect Beverage Color Preference?	Third Place
BE-139	The Vision of Videogames	
BE-143	FOOL ME ONCE	Third Place

Biological Sciences

BS-002	Analysis of genes implicated in NASH disease	
BS-003	The Role of Beta-Endorphin in Binge Eating in Female Mice	Second Place
BS-004	Is vision necessary for spatial memory in dogs	
BS-010	What Makes Thick Yogurt?	Third Place
BS-022	Does temperature affect bacterial growth?	Third Place
BS-024	The solution to soil erosion	
BS-029	Electrical Stimulated Modulation of Brain Connectivity in Parkinson's Disease Patients: an EEG-fMRI Study	
BS-032	Why Do Vertebrates Have Decussated Corticospinal Tracts?	First Place
BS-034	Anterior Posterior Indices as a Novel Quantitative EEG Biomarker for Alzheimer's Disease	
BS-039	Using Convolutional Neural Networks to Detect the presence of Tumors in Brain MRIs	Second Place
BS-045	Circulome: Single-cell morphological characterization of non-native cells circulating in the blood, a method for early detection of metastasis and non-invasive biopsies	Third Place
BS-046	Does Different Light Intensity Affect The Rate Of Photosynthesis	
BS-047	Assessing AlphaFold's Structural Predictions: An Analysis of Prediction Accuracy, Confidence, and Sequence Homology Effects on Unseen Protein Structures	Second Place
BS-064	Uncovering Alk1-mediated arteriovenous malformations using vascular imaging analysis	Third Place
BS-066	Does the Time at Which You Apply Antibiotics to a Wound Affect the Amount of Bacteria Growth?	Third Place
BS-068	Can Swimmers Hold Their Breath Longer Than People Who Don't Swim Often?	
BS-073	In Which Environment do Radishes Grow Best	Third Place
BS-076	BrainSys: A Software Solution to Democratize Mental Health Treatments using Machine Learning and Finite Element Analysis	Third Place
BS-077	The effect of habitat on the number of adult ticks collected from a California Bay Area Regional Park	First Place
BS-078	Heart Rate: The Science of Music	Third Place
BS-087	Antibacterial and Fluorescence Properties of 10 Common Spices from India and Iran	
BS-098	Burning All the Time?	First Place
BS-099	Blinding Fruits	
BS-100	Screening Your Sunscreen for Best UV Protection	Second Place
BS-106	DNA Fields Forever	First Place
BS-116	Hyaluronic Acid for Healthy Skin	
BS-117	Which Enzyme Does it Best?	Second Place
BS-119	Understanding the Distribution of Particles In Microgravity for Liver Tissue Engineering	
BS-121	Keep It Fresh: What Is The Best Method to Preserve Organic Strawberries And Make Them Last Longer?	Second Place
BS-123	Can Music Move Your Heart	Third Place
BS-127	Effects of Caffeine on Bacteria and Mold Growth	
BS-129	Fucoidan's Effect on Breast Cancer Cells in Vitro at Different Concentrations	Third Place
BS-130	Daphnia: Wastewater Warriors	Third Place
BS-133	The importance of endocytosis in nrg1 back signaling	
BS-134	Cultivating Colors	Second Place
BS-138	(Soda) Pop Goes the Enamel!	Third Place
BS-140	Chemotaxis of C. elegans in response to different foods	First Place

Computer Science

CS-007	A Novel Machine Learning Approach to Validate Login Attempts and Prevent Account Takeovers for Enhanced Cybersecurity	Second Place
CS-018	PACTER: Point and Click Tool to Enhance Readability of Medical Reports	
CS-019	Deep Learning Dendrite Segmentation with Cross-Day Matching to Analyze Spine Turnover Rates of Mice Neuron 2-Photon Microscopy Images	Third Place
CS-021	AQUASENT-TMAE: A Novel Self-Supervised Learning Method for Water Quality Monitoring with Remote Sensing	Third Place
CS-025	Development and Evaluation of a Machine Learning Model for Predicting Liver Cancer Using miRNA Expression Profiles	Third Place
CS-027	A Novel Computer Vision Approach to Sickle Cell Detection	Second Place
CS-042	A Novel Hybrid Quantum Architecture for Near-term Generalized Convolutional Neural Network	First Place
CS-043	Early Recurrence Prediction of Invasive Ductal Carcinoma Utilizing High-Dimensional Gene Expression Data	
CS-051	Medical Imaging Through Artificial Intelligence: Classifying Adenocarcinoma Tumors as Benign or Malignant Through Machine Learning Taxonomies for Biospy Analysis	
CS-059	Power Saving MANGO	Second Place
CS-062	The Future of Disease Diagnosis	Third Place
CS-067	AI-Powered Emotion Detection	Second Place
CS-069	Understanding Adolescent E-cigarette Use: Machine Learning to Explore Potential Risk Factors	Third Place
CS-097	Working With WiFi	First Place
CS-102	Traffic Simulator for Vehicle Flow Optimization	Third Place
CS-108	Protein Subcellular Localization Prediction using BERT-based Deep Learning Model	
CS-136	A Multimodal LLM System for Helping the Blind See	Second Place
CS-137	AI Debate Trainer	First Place
CS-141	Care Companions: The Attentive Protector for Elderly Independence	Third Place
CS-142	AI-Assisted In-Situ Medication Classification	Third Place

Engineering: Electrical and Mechanical

EE-005	01/20/2024	
EE-030	Project: AQUAPAD	Second Place
EE-033	Safety bag	Second Place
EE-036	An Amphibious Snake Robot that Can Adapt to Different Landscapes	First Place
EE-049	Eco-Sorter- AI Waster Identifier	Third Place
EE-065	The Backpack Organizer	Third Place
EE-079	PuraFlo: Centrifugation-based Water Filtration System to Reduce Turbidity in Water Treatment and Ecosystems	First Place
EE-091	The Most Cordlessly Stable Floating Table, Wait Wha-	Second Place
EE-101	Will Placing a Mirror Over Solar Panels Increase the Millivolts Collected?	Second Place
EE-118	Bridge Busters	Second Place
EE-119	Snoofer Bot: An Autonomous Mapping Robot	Second Place

Environmental Sciences

EV-008	Drawing Water Out of Thin Air: Semi-Automatic Dew Collection with Arduino-Controlled Peltier Modules and Cacti-Inspired Biomimicry	Second Place
EV-020	How The Germination Of Eschscholzia Californica (California Poppy) and Phacelia Campanularia (California Bluebell) When Subjected To Eucalyptol From Eucalyptus Trees Is Affected by Chicken Manure And Ammonium Plant Supplement	First Place
EV-037	Application of Ferrofluid Nanotechnology to Clean Oil Spills	Third Place
EV-040	Sustainable Transportation: A Novel Attachable Device for Automotive Tailpipes to Convert Carbon to Ethanol by Metal-Organic-Framework and Copper Catalyst Combination	Third Place
EV-044	Air Quality Levels at Different Locations in San Carlos	Second Place
EV-056	Comparing Eco-Sustainable Hydrogels on Water Absorption and Retention in Soil	Second Place
EV-057	Different Types Of Waters' Effect On Microgreens' Growth and Flavor	Third Place
EV-071	Solar-Powered Desalination	Third Place
EV-072	The Effect of Trees During Wildfires on Families and Their Homes	Third Place
EV-075	How Do Growing Seeds Respond to Gravity?	Third Place
EV-088	Sustainable, Low-Cost Approach to Desalination: A Novel Hydropower Energy Generation System	Second Place
EV-092	Fog City	Third Place
EV-103	Filtering with Nature's Touch	
EV-105	Is the Ocean A Scrap Yard?	
EV-109	Wind for the Win	Third Place
EV-110	How does Soil Affect the pH of Water?	Third Place
EV-113	PHYT CLUB	
EV-122	Fantastic Bioplastic	
EV-126	How Effective Are Electric Currents and Magnetic Fields on Plant Growth?	Third Place

Mathematical Sciences

MA-031	The Ultimate Strategy	Second Place
MA-061	Reproducible	Third Place
MA-095	Arithmetic of Semisubtractive Semidomains	Second Place
MA-120	Identification of a Novel and Accurate Mathematical Method of Parkinson's Diagnosis	Second Place
MA-144	Creating an App That Simulates Disease Spread Through SEIR Mathematical Models	Third Place

Physical Sciences

PS-012	"which treats do dogs prefer the most?"	Third Place
PS-014	Colorful OJ	Third Place
PS-026	Faucet3D: 3D Printed Copper-Oxide infused PLA Water Faucet created using Onshape and optimized with Prusaslicer with a cost of under 1\$	First Place
PS-035	The Chemistry of Cosmetology: Making an Antimicrobial Facial Toner from Natural Ingredients	Second Place
PS-041	Complete Molecular Structure Prediction From Infrared Spectroscopy Using Deep Learning	Second Place
PS-048	How Does Seating Arrangement Affect String Orchestra Performance and Perception?	Second Place
PS-052	WInGing it: Wingspan for Airspeed?	Second Place
PS-053	How does temperature affect the strength of a magnet?	
PS-054	Micro-Fast	Third Place
PS-055	Music Genres and Time Estimation	Second Place
PS-058	Watts with the Cold	Third Place
PS-060	How Does Temperature Affect the Surface Tension of Water?	
PS-081	Marble Roller Coaster	Third Place
PS-082	Sizzling in the Sun	First Place
PS-083	The Best Insulator	Third Place
PS-084	The Power of Flour	Second Place
PS-085	Fast and Furious!	First Place
PS-086	The Science Behind Battery Longevity	First Place
PS-093	High Impact	Third Place
PS-094	Salt's Secret Dance Party on Ice	Second Place
PS-114	Magnet Drop Tower	Second Place
PS-115	Which Type of Orange Juice Provides the Most Vitamin C?	Second Place
PS-131	HOLY COW! Milk Into Plastic?	Second Place
PS-132	Edible Alchemy Featuring KEFIR	Third Place