Connecticut Science & Engineering Fair
Quinnipiac University
March 2 - 14, 2026
Special Award Winners

All special award winners are required to attend the awards ceremony on Saturday. Be sure to acknowledge by going to the CHECK-IN page.

https://ctsciencefair.org/finalists-special-awards-check-in

[SchTown]   [School]   [Teacher]
[Proj#] [FCat] [Project Title]

Avon   Talcott Mountain Science Center   Kaitlyn Roberts

| 5003 | P7 | Engineering A Durable Algae-Argonite Alkalinity System To Reduce CO2 Driven Ocean Acidification and Enhance Biological Resilience In Coastal Marine Ecosystems |

Student(s) Raji Doshi   **Grade** 7   **Town** Farmington

Bethel   Bethel High School   Raymond Turek

| 6046 | PS | The Effect of Hydroxyapatite Concentration Within Dentistry Composite Resin on the Wear, Acidic Erosion, and Discoloration on a Synthetic Tooth. |

Student(s) Amanda Almeida   **Grade** 12   **Town** Bethel

Bethel   Bethel High School   Ray Turek

| 6003 | PS | Fleet for Localized Atmospheric Research and Environmental Surveillance (FLARES): Autonomous drones and machine learning working for a cleaner environment. |

Student(s) Toshan Bhattacharya   **Grade** 11   **Town** Bethel

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Bozrah   Fields Memorial School   Joshua Fish

| 1003 | LT | The Impact of Ice Melting Substances On Unicellular Organisms In Pond Water |

Student(s) Analise Williams   **Grade** 8   **Town** Bozrah

Ella Sikorski   **Grade** 8   **Town** Bozrah

Bridgeport   Black Rock School   Elizabeth Moran

| 5528 | P8 | Solar vs Battery Powered Car Performance |

Student(s) Robert Daley   **Grade** 8   **Town** Bridgeport

Bridgeport   Bridgeport Regional Aquaculture Center   Holly Turner

| 3199 | LS | Impact of increasing water temperatures on strobilation rates in Aurelia aurita. |

Student(s) Calyn Fletcher   **Grade** 10   **Town** fairfield

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Bridgeport   Bridgeport Regional Aquaculture Center   Holly Turner

| 3510 | LST | How Light Color Influences Agar Production in Gracilalia tikvahiae. |

Student(s) Cherelle Ricketts   **Grade** 10   **Town** Bridgeport

Joshua Ball   **Grade** 11   **Town** Bridgeport

Bridgeport   Fairchild Wheeler Biotech   Tara Liskov

| 3515 | LST | Testing the Efficacy of Non-Toxic Substances on the Destruction of Lanternflies and Egg Masses |

Student(s) Maxwell Egbuzie   **Grade** 12   **Town** Bridgeport

Sebastian Polanco   **Grade** 12   **Town** Bridgeport

Bridgeport   Fairchild Wheeler Biotech   Marilyn Carolina

| 3036 | LS | Budgerigars' Behavioral Responses to Different Genres of Music |

Student(s) Carolyn Fox   **Grade** 12   **Town** Bridgeport

Bridgeport   Fairchild Wheeler Biotech   Lucien Bouffard

| 3109 | LS | Equine Cooling Patterns: Physiological Modification |

Student(s) Carly Grimm   **Grade** 9   **Town** Norwalk

Conn. Science & Engineering Fair   *Special Award Winners*

Bridgeport   Interdistrict Discovery Magnet School   Susan Berez

2002	L7	Starch Wars

Student(s) Alicia Palacios	Grade 7	Town Bridgeport

Bridgeport   IT & Software Engineering High School   Ricki Chiem

6510	PST	How Effectively Can AI Classify Waste?

Student(s) Alan Brewster	Grade 10	Town Milford
Mikayla Larbi	Grade 10	Town Bridgeport
Brandon Granados Pastora	Grade 10	Town Bridgeport

Bridgeport   John Winthrop School   Srilakshmi Kongani

5510	P8	Insulation Investigation

Student(s) Lavinya Baence	Grade 8	Town Bridgeport

Bridgeport   Multicultural Magnet School   Corina Starn

4006	PT	SMART CANE

Student(s) Erick Aquino	Grade 8	Town Bridgeport
Dhavid Caetano	Grade 8	Town Bridgeport

Bridgeport   Read School   Trisha Bartholomew

5509	P8	How Does Air Flow Around Different Shape of Cars?

Student(s) Aaron Samaroo	Grade 8	Town bridgeport

Bridgeport   Warren Harding High School   Shelton Neale

3117	LS	Plants Grow in Different Soils

Student(s) Joseph Colon-Machado	Grade 11	Town Bridgeport

Cheshire   Cheshire High School   Julie Barker

6030	PS	Towards Faster Materials Simulation: GPU-Optimized Neural Networks for Interatomic Potentials

Student(s) Raine Ma	Grade 11	Town Cheshire

Danbury   Saint Joseph School   Kathleen Spina

2513	L8	To Drink or Not To Drink: How clean is your water?

Student(s) Christopher Caputo	Grade 8	Town danbury

Danbury   St. Gregory the Great School   Christine Fahey

2511	L8	Novel & Portable Cards For Detection of Common Food Allergens

Student(s) Rahil Shah	Grade 8	Town Danbury

Danbury   Westside Middle School Academy   Nancy Barlow

4001	PT	What desalinates water the most efficiently; Solar Distillation, Reverse Osmosis, and Boiling

Student(s) Joseph Brocia	Grade 7	Town Danbury, CT
Colin Guidotti	Grade 7	Town Danbury
Brian Saltzman	Grade 7	Town Danbury

Danbury   Westside Middle School Academy   Nancy Barlow

4009	PT	What is the Affect of Wing Design on the Speed a Model Plane Flies?

Student(s) Shihan Lin	Grade 8	Town Danbury
Isabella Amenta	Grade 8	Town Danbury
Ally Kay	Grade 8	Town Danbury

[SchTown]   **[School]**   **[Teacher]**
  [Proj#] **[FCat]** **[Project Title]**

Danbury   Westside Middle School Academy   Nancy Barlow

| 1020 | LT | How Do Organisms Affect The Rate Off Food Decomposition? |

| Student(s) | Reina Melendez | **Grade** 8 | **Town** Danbury |
| | Sophia Cardenas | **Grade** 8 | **Town** Danbury |

Danbury   Westside Middle School Academy   Nancy Barlow

| 4005 | PT | Can You Detect Muons and Cosmic Rays Using Household Materials? How do Coronal Mass Ejections affect the number of muons and cosmic rays detected? |

| Student(s) | Sean O'Marra | **Grade** 8 | **Town** Danbury |
| | Alius Santiago-Stra | **Grade** 8 | **Town** Danbury |

Danbury   Westside Middle School Academy   Nancy Barlow

| 4017 | PT | The Effect of Phone Case Materials on EMF Radiation from an iPhone Under Various Scenarios. |

Student(s)	Gowtham Vallinayagam	**Grade** 8	**Town** Danbury
	Edward Sola	**Grade** 8	**Town** Danbury
	Rafael Barreto	**Grade** 8	**Town** Danbury

Danbury   Westside Middle School Academy   Nancy Barlow

| 1013 | LT | How can we use phytoremediation to extract different heavy metals out of soil? |

| Student(s) | Rhea Yadav | **Grade** 8 | **Town** Danbury |
| | Aanya Popuri | **Grade** 8 | **Town** Danbury |

Darien   Darien High School   Guy Pratt

| 3200 | LS | The effects of psychiatric service dogs on veterans with PTSD and co-occurring mental health disorders: A Meta-Analysis |

| Student(s) | Anastasia Buchesky | **Grade** 12 | **Town** Darien |

Darien   Darien High School   David Lewis

| 6085 | PS | Functionalizing DNA Nanotechnology: Optimizing the Impact of Buffer Conditions on Chemical Ligation |

| Student(s) | Claire Chan | **Grade** 12 | **Town** Darien |

Darien   Darien High School   David Lewis

| 6091 | PS | Post-Robbing Behavioral Shifts in Native and Invasive Bees |

| Student(s) | Stella Nehro | **Grade** 12 | **Town** Darien |

East Lyme   East Lyme High School   Cecilia Prytko

| 3182 | LS | Baby Connect: A haptic solution for deaf parents |

| Student(s) | Sashrika Das | **Grade** 10 | **Town** East Lyme |

Farmington   Farmington High School   Alexandra Raymunt

| 6520 | PST | Utilizing Banana Peels to Depollute Water |

Student(s)	Aniket Menon	**Grade** 10	**Town** Unionville
	Andrew Nguyen	**Grade** 10	**Town** Farmington
	Daniel Marimekala	**Grade** 10	**Town** Farmington

Farmington   Miss Porter's School   Christine Scanlon

| 3138 | LS | How Cooking Affects Antioxidant Levels in Cauliflower and Their Role in Cancer Prevention |

| Student(s) | Olivia Cheon | **Grade** 11 | **Town** Seoul |

[SchTown]   **[School]**   **[Teacher]**
  [Proj#] [FCat] [Project Title]

Glastonbury   Glastonbury High School   Stephen Falcigno

| 6079 | PS | OPTIMIZATION FEASIBILITY ANALYSIS OF COMPLIANT MECHANISM REPLACEMENTS OF HYDRAULICS IN PENDULUM TUNED MASS DAMPERS |

   Student(s) Diego Aguilar   **Grade** 12   **Town** South Glastonbury

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Glastonbury   Glastonbury High School   Stephen Falcigno

| 6035 | PS | Green Cellulose Extraction From Autumn Leaves For Biodegradable Packaging Films |

   Student(s) Ioana Popescu   **Grade** 11   **Town** Glastonbury

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Greenwich   Brunswick School   Dana Montañez

| 3525 | LST | Linking Bacterial Contamination in Public Water Sources to Daphnia Behavior and Health |

   Student(s) Owen Bartoszek   **Grade** 11   **Town** Greenwich
              Aidan Williams   **Grade** 11   **Town** Greenwich

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Greenwich   Brunswick School   Dana Montanez

| 3536 | LST | Biochar as a Bioremediation Method to Control Microplastic Effects on Agricultural Crops |

   Student(s) Giancarlo Cuesta   **Grade** 10   **Town** Stamford
              Quinn Cunningham   **Grade** 10   **Town** Greenwich

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Greenwich   Brunswick School   Dana Montanez

| 3177 | LS | Preventing Zoonotic Parasitic Growth in Freshwater Aquaculture Using Aerogel Praziquantel Feed Additives |

   Student(s) Sawyer Sacks   **Grade** 11   **Town** Greenwich

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Greenwich   Brunswick School   Dana Montanez

| 6039 | PS | Comparative Study of Magnetohydrodynamic Propulsion Designs for Marine Applications |

   Student(s) Jack Wendell   **Grade** 11   **Town** Greenwich

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Greenwich   Central Middle School   Andrew Bramante

| 2503 | L8 | In situ, Natural Degradation of Cyanotoxins in Water by L. acidiphilus, with Concurrent Stimulation of the Aquatic Ecosystem |

   Student(s) Clarissa Maldonado   **Grade** 8   **Town** Greenwich

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Greenwich   Eastern Middle School   Andrew Bramante

| 5515 | P8 | Computer Simulation for School Traffic Optimization |

   Student(s) Ivyn Chen   **Grade** 8   **Town** Greenwich

Greenwich   Eastern Middle School   Andrew Bramante

| 5506 | P8 | OASIS: A Solar-Powered Off-Grid System for Harvesting Water from Subsurface Sand Moisture to Support Desert Vegetation Recovery |

   Student(s) Jiahao Luo   **Grade** 8   **Town** Greenwich

Greenwich   Greenwich Country Day School   Nathan Haag

| 3099 | LS | Viability of Freshwater Mussels as a Water-Management Tool in America |

   Student(s) Cate Auerswald   **Grade** 12   **Town** Cos Cob

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Greenwich   Greenwich Country Day School   Nathan Haag

| 6020 | PS | Effects of different drive-signal strategies on refresh rate and resolution of a Micro controller-driven CRT display. |

   Student(s) Oliver Davis   **Grade** 11   **Town** Riverside

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Conn. Science & Engineering Fair

Special Award Winners

Greenwich   Greenwich High School   Andrew Bramante

3094	LS	Determining how prevalence of single nucleotide polymorphisms alters HLA molecule's expression, and dictates Juvenile Idiopathic Arthritis' best treatments in specific populations

Student(s) Tessa Addeo   **Grade** 10   **Town** Greenwich

Greenwich   Greenwich High School   Andrew Bramante

3185	LS	Development of a Novel Nanoparticle Drug Delivery System using OLAH Targeting to Deliver Surfactant Protein and Prevent Neonatal Respiratory Distress Syndrome

Student(s) Tyler Malkin   **Grade** 10   **Town** Greenwich

Greenwich   Greenwich High School   Andrew Bramante

3125	LS	Creation of PACA nanoparticles with a chitosan bilayer for effective oral delivery of a sildenafil PDE-5

Student(s) Neil Pendkar   **Grade** 11   **Town** Old Greenwich

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Greenwich   Greenwich High School   Andrew Bramante

3059	LS	Discovery and Validation of Biopolymer Coatings for Nanoparticle-Loaded Silk Fibroin Sutures to Accelerate Tissue Regeneration with a Novel Multimodal Machine Learning Model

Student(s) Raghav Ramji   **Grade** 10   **Town** Riverside

Greenwich   Greenwich High School   Andrew Bramante

6097	PS	Process Optimization of Green Chemistry Pathway for Fabric-to-Fabric Recycling of Cotton

Student(s) Marley Wies   **Grade** 12   **Town** Old Greenwich

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Greenwich   Greenwich High School   Andrew Bramante

3007	LS	Novel On Chip Screening Device for Ovarian Cancer with Algorithm from SVM-RFE on Serum miRNA Relative Expression Orderings

Student(s) Sophie Yu   **Grade** 11   **Town** Riverside

Greenwich   Sacred Heart Greenwich   Joyce Reed

3203	LS	Hearing Loss's Correlation to Anxiety

Student(s) Haley Blackwell   **Grade** 12   **Town** Rye

Greenwich   Sacred Heart Greenwich   Mary Musolino

4007	PT	Evaluating Biodegradable Plastics Made from Avocados, Bananas, and Mangos

Student(s) Lauren Davidoff   **Grade** 8   **Town** Pelham

Grace Nicholas   **Grade** 8   **Town** Armonk

Greenwich   Sacred Heart Greenwich   Mary Musolino

4014	PT	Purifying Water using Different Types of Graphene to Adsorb Harmful Pollutants

Student(s) Adriana Hassani-Sadi   **Grade** 8   **Town** Old Greenwich

Malaika Bazie   **Grade** 8   **Town** White Plains

Greenwich   Sacred Heart Greenwich   Mary Musolino

4004	PT	Evaluating the Effectiveness of Supplementing Simulated Lunar Soil to Promote Crop Growth for Future Lunar Missions

Student(s) Lily Hohensee   **Grade** 8   **Town** Stamford

Lily Chase   **Grade** 8   **Town** Rye

Paige Yantz   **Grade** 8   **Town** Greenwich

Conn. Science & Engineering Fair   *Special Award Winners*

Greenwich   Western Middle School   Andrew Bramante

| 5505 | P8 | Creating a Crab Trap That Uses Computer Vision To Detect and Capture the Invasive European Green Crab |

Student(s) Laila McQueen   **Grade** 8   **Town** Greenwich

Greenwich   Western Middle School   Andrew Bramante

| 5526 | P8 | Comparative analysis of CO2 Reduction by Common Houseplants Using an Arduino-Based Environmental Monitoring System |

Student(s) Victoria Shkabarnya   **Grade** 8   **Town** Greenwich, CT

Hamden   Hamden Hall Country Day School   Paulomi Aldo

| 5522 | P8 | Which shapes are the best for making the most aerodynamic car |

Student(s) David Esposito   **Grade** 8   **Town** North Haven

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Hamden   Hamden Hall Country Day School   Paulomi Aldo

| 2510 | L8 | The Effect of Fungi on Plastic Decomposition |

Student(s) Emma Gammans   **Grade** 8   **Town** Woodbridge

Hamden   Hamden Hall Country Day School   Paulomi Aldo

| 2505 | L8 | The Amount of Carbon Dioxide That Nannochloropsis, Chlorella, and Chlamydomonas can Photosynthesize |

Student(s) Gabi Pereira   **Grade** 8   **Town** Hamden

Hamden   Hamden Hall Country Day School   Daniel Kemp

| 6517 | PST | How Does pH Affect the Corrosion Rate of Steel? |

Student(s) Yuxiao Yang   **Grade** 9   **Town** Guilford
         Jiale Luo   **Grade** 9   **Town** Derby
         Xinyi Xiao   **Grade** 9   **Town** Derby

Kent   Kent School   Michael Green

| 3058 | LS | MelodyMemo: A Novel Emotion-Aware Memory-Music Modeling and Recommendation System for Older Adults |

Student(s) Newton Niu   **Grade** 11   **Town** Stamford

Kent   Kent School   Jesse Klingebiel

| 6092 | PS | Modular Development of a Pneumatic Lumbar Exoskeleton for Assisting Stoop Lifting |

Student(s) Yu Tung Shan   **Grade** 10   **Town** Kent

Mansfield   Edwin O. Smith High School   Cheryl Granger

| 3528 | LST | Optimizing Jurkat Cell Cryopreservation Formulation for Safer T-Cell Therapy |

Student(s) Alice Han   **Grade** 11   **Town** Storrs
         Bibhuti Marasini   **Grade** 11   **Town** Storrs

Mansfield   Edwin O. Smith High School   Cheryl Granger

| 3211 | LS | Researching the Effects Of Different Concentrations of Formaldehyde on the Presence of Different Species of Bacteria in Soil |

Student(s) Avery Hancock-Braun   **Grade** 10   **Town** Storrs

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Montville   Saint Thomas More School   Yajamana Ramu

| 3129 | LS | Towards Climate-Smart Agriculture: Decoding PP2C Gene Functions for Abiotic Stress Resilience in Maize |

Student(s) Ami Rastogi   **Grade** 11   **Town** Monroe Township

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Conn. Science & Engineering Fair   *Special Award Winners*

New Haven   Engineering and Science University Magnet   Alyssa Anderson

| 5008 | P7 | BiteSight: Development of a Mobile Deep Learning Application for Bug Bite Identification |

Student(s) Cayden Joseph   **Grade** 7   **Town** West Haven

New Haven   Engineering and Science University Magnet   Alyssa Anderson

| 4011 | PT | Which Material Erodes The Most |

Student(s) Jacob Werlin   **Grade** 7   **Town** New haven

Finnian Dooley   **Grade** 7   **Town** New Haven

New Haven   Hopkins School   Phillip Stewart

| 6040 | PS | Arduino-Based Active Stabilization System for Model Rockets Using IMU Feedback and Servo-Driven Fins |

Student(s) Aiden Gomez   **Grade** 10   **Town** Orange

New Haven   Hopkins School   Leilei Shinohara

| 5521 | P8 | Optical Fire Detection using Computer Vision |

Student(s) Maki Lawrence Shinohara   **Grade** 8   **Town** New Haven

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Norwich   Norwich Technical High School   Kaitlin McKale

| 3057 | LS | Influence of microplastic size and density on the structure of microbial communities: Implications for soil health |

Student(s) Nyashia Bostick   **Grade** 11   **Town** Willimantic

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Plainville   Plainville High School   Michelle Bellinger

| 6005 | PS | Improving Airplane Efficiency and Maximizing a Sustainable Angle of Attack Through Acoustic Streamlining |

Student(s) Raman Kasabrukhau   **Grade** 10   **Town** Plainville

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Pomfret   Pomfret School   Annie O'Sullivan

| 6124 | PS | Leg exoskeletons that can help people with leg disabilities walk |

Student(s) Jiazhi Zhao   **Grade** 10   **Town** Pomfret

Ridgefield   Ridgefield High School   Ryan Gleason

| 3141 | LS | Prevalence of Pathogens in Asian Longhorn Ticks (Haemaphysalis Longicornis) in Bridgeport Connecticut |

Student(s) Sara Hill   **Grade** 12   **Town** Ridgefield

Simsbury   Westminster School   Mike Van Dolah

| 6513 | PST | Multi-Function Submersible for Microplastic Collection and Aquatic Environmental Analysis |

Student(s) Muqiao Zong   **Grade** 10   **Town** Simsbury

Andrew Ma   **Grade** 11   **Town** Simsbury

South Windsor   South WIndsor High School   April Davis

| 6508 | PST | Green Light AI |

Student(s) Devdutt Bhatte   **Grade** 10   **Town** South Windsor

Jude Pohl   **Grade** 10   **Town** South Windsor

Srivashist Gaddam   **Grade** 10   **Town** South Windsor

South Windsor   South Windsor High School   Danel Eitel

| 6011 | PS | From Fumes to Fertilizer: A Dual-Stage Catalytic System Converting Livestock Methane into Carbonate for Sustainable Crop Growth |

Student(s) Aniron Pal   **Grade** 10   **Town** South Windsor

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[SchTown] **[School]** **[Teacher]**
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South Windsor   South Windsor High School   Danel Eitel

| 3518 | LST | Cyanopanels |

Student(s)	Diva Shajith		**Grade** 10	**Town** South Windsor
	Amariah Ysabelle Luci		**Grade** 10	**Town** South Windsor
	Sahasra Natti		**Grade** 10	**Town** South Windsor

South Windsor   South Windsor High School   Minatchy Visvanathan

| 6061 | PS | DOTBot: Diffusion-Aligned Chain-of-Thought Bipedal Humanoid Robot for Interpretable Real-Time Autonomous Navigation, Hazard Mitigation, and Recovery in High-Risk Built Environments |

| Student(s) | Karthik Srikumar | **Grade** 11 | **Town** South Windsor |

Stamford   King School   Victoria Schulman

| 6088 | PS | Real-Time Instance Segmentation for Curb and Path Detection in Assistive Wearables for Blind and Low-Vision Assistance |

| Student(s) | Olivia Ajayi | **Grade** 11 | **Town** Stamford |

Stamford   King School   Victoria Schulman

| 6072 | PS | Predicting Detectability of Transiting Exoplanets: A Python-based Signal-to-Noise Ratio Model |

| Student(s) | Mia Jakubowsky | **Grade** 11 | **Town** Rye |

Stamford   King School   Victoria Schulman

| 6083 | PS | A Sustainable Treatment For Heavy Metal Pollution: Adsorption and Desorption of Ni(II) Ions In Water Using DNA-Wrapped Carbon Nanotubes |

| Student(s) | Bruno Reinhoefer Ribeiro | **Grade** 12 | **Town** Riverside |

Stamford   King School   Victoria Schulman

| 3108 | LS | Assessing the Effects of Equine Grazing Muzzles on Upper Incisor Length and Dental Qualities in Ponies |

| Student(s) | Marilyn Sommerville | **Grade** 11 | **Town** South Salem |

Stamford   Laurel Springs School   Vera Ulanovskaya

| 6096 | PS | Driven By Demand: A Mixed-Integer Linear Programming Framework to Optimize the Efficiency and Quality of Bus Services in Stamford, CT |

| Student(s) | Victoria Makarov | **Grade** 12 | **Town** Stamford |

Stonington   St. Michael School   Anna-Helene Grossomanides

| 5518 | P8 | Investigating the effect of tire type on robot performance |

| Student(s) | Tyler Baltrukonis | **Grade** 8 | **Town** Pawcatuck |

Stonington   St. Michael School   Anna-Helene Grossomanides

| 5016 | P7 | Potter Hill Problem |

| Student(s) | Vito Gynther | **Grade** 7 | **Town** Westerly |

Stonington   St. Michael School   Anna-Helene Grossomanides

| 2507 | L8 | To Swim or Not To Swim |

| Student(s) | Camille Thomas | **Grade** 8 | **Town** Gales Ferry |

Stratford   St. Mark School   Andrea Borbor

| 5512 | P8 | Crash! Testing Model Cars |

| Student(s) | Stella Jass | **Grade** 8 | **Town** Trumbull |

[SchTown]   **[School]**   **[Teacher]**
 [Proj#] [FCat] [Project Title]

Trumbull   Trumbull Agriscience & Biotechnology   Kevin Boken

| 6056 | PS | Development of a Multi-Axis Adaptive Inertia Regulation Exoskeleton System: A Counter-Rotational Gyroframe for Stabilization and Energy Efficiency |

Student(s) Johnathon Lin   **Grade** 10   **Town** Bridgeport

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Wallingford   Choate Rosemary Hall   Jan Cook

| 3111 | LS | Innovative Restoration of Coastal Marine Ecosystems: Phage-Based Disease Control and pH Modulation in Connecticut Waters |

Student(s) Taeyoung Kim   **Grade** 10   **Town** Seattle

Wallingford   Choate Rosemary Hall   George Gu

| 6111 | PS | NeuroMirror: An Intelligent EEG-Driven Mirror Therapy System Grounded in Hebbian Theory for Post-Stroke Upper-Limb Rehabilitation |

Student(s) Sabrina Liu   **Grade** 10   **Town** Wallingford

Wallingford   Choate Rosemary Hall   Talia Dell Angelo

| 6531 | PST | Harvesting Water from Air: Optimization of a Novel Solar-Powered Atmospheric Water Generator |

Student(s) Hsiao Chian Tseng   **Grade** 11   **Town** Bellevue
           Hiyab Mebrahtu   **Grade** 11   **Town** Haverford

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Waterbury   ACES Chase Academy   Anne Pember

| 6022 | PS | Using chitin and chitin-based derivatives to remove and remediate nitrates. |

Student(s) Kathryn Thibeault   **Grade** 9   **Town** Waterbury

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Watertown   The Taft School   Amanda Benedict

| 3179 | LS | Investigating the Neuroprotective and Stress-Modulating Effects of Oxytocin on Human Cells under Cortisol-Induced Stress Conditions |

Student(s) Esther Lee   **Grade** 10   **Town** Watertown

Watertown   The Taft School   Amanda Benedict

| 6070 | PS | A Novel Equestrian Virtual Reality-Based Coordination Rehabilitation System for Post-Stroke Motor Recovery |

Student(s) Mily Xue   **Grade** 10   **Town** Watertown

Westport   Greens Farms Academy   Mathieu Freeman

| 6109 | PS | Open Alert: A Novel Alert System For School Safety |

Student(s) Benjamin Kiev   **Grade** 9   **Town** Westport

Westport   Greens Farms Academy   Mathieu Freeman

| 6044 | PS | Developing a Methodology to Predict Flash Flooding in Southwestern Connecticut Using Historic Flood Events and Weather Data |

Student(s) Oliver Rohrbasser   **Grade** 12   **Town** Wilton

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Westport   Greens Farms Academy   Julianne Gerdes

| 3040 | LS | The Psychology of Yondr Pouches and The Impact on Student Well-being |

Student(s) Amalia Slade   **Grade** 12   **Town** Westport

Westport   Greens Farms Academy   Mathieu Freeman

| 3016 | LS | A Data-Driven Evaluation of Behavioral and Dermatologic Factors in Adolescent Skincare Practices in the Context of Social Media Exposure |

Student(s) Anika Vaidheeswaran   **Grade** 11   **Town** Stamford

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[SchTown] **[School]** **[Teacher]**
 [Proj#] [FCat] [Project Title]

Westport Staples High School Amy Parent

| 6025 | PS | Evaluation the Therapeutic Potential of Curcumin in Improving Motor Neuron Health in Spinal Muscular Atrophy |

Student(s) Sofia DiLeo **Grade** 12 **Town** Westport

Westport Staples High School Amy Parent

| 3186 | LS | Comparing deep learning architectures with multispectral imaging for early detection of Black Cutworms on Bush Beans |

Student(s) Ezra Schwartz **Grade** 12 **Town** Westport

Wilton Middlebrook School Leah Pariso

| 4002 | PT | Dual Axis Automatic Solar Tracker |

Student(s) Aarya Patel **Grade** 7 **Town** Wilton
Aaryan Patel **Grade** 7 **Town** Wilton

Wilton Middlebrook School Jessica Garcia

| 5519 | P8 | How Microplastics in Water Affects Cymatics |

Student(s) Jiya Praveen **Grade** 8 **Town** Wilton

Wilton Middlebrook School Janica Bagosy

| 5525 | P8 | Smart Plant Care: Using Automation and AI |

Student(s) Pratap Sharma **Grade** 8 **Town** Wilton

Wilton Wilton High School Nomita Ramchandani

| 6026 | PS | OleoFoam: A Magnetically Controlled Oleophilic Foam for Targeted Oil Absorption |

Student(s) Arav Gupta **Grade** 10 **Town** Wilton

Wilton Wilton High School Matthew Hoyt

| 6087 | PS | Improving Space Weather Forecasting Through Multivariate Machine Learning Analysis for SPE (Solar Particle Event) Prediction. |

Student(s) Ishanvi Jaiswal **Grade** 11 **Town** Wilton

Windsor Academy of Aerospace & Engineering Joshua Madore

| 6093 | PS | Optimizing the Efficiency of Solar Cells using Enhanced Cooling Techniques. |

Student(s) Palaniappan Manikandan **Grade** 10 **Town** Ellington

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Windsor The Loomis Chaffee School Fahmeed Sheehan

| 6027 | PS | Continual Learning with Elastic Weight Consolidation for Human Tree Person Test Frameworks |

Student(s) Ria Sunwoo An **Grade** 11 **Town** Windsor

Windsor The Loomis Chaffee School Fahmeed Sheehan

| 6122 | PS | LISTEN – A Robotic Leak Identification System using TDNN and ENhanced Acoustic Features for Pipeline Detection |

Student(s) Jiaxuan Li **Grade** 11 **Town** Cupertino

Windsor The Loomis Chaffee School Fahmeed Sheehan

| 3019 | LS | Can Dead Bacteria Clean Up Our Gardens? Using EPS-Rich Biomass and Biochar to Lower Soil Lead Below 200 ppm |

Student(s) Li-An Ye **Grade** 9 **Town** San Jose

Woodbridge Amity Regional High School Sarah Reeves

| 3198 | LS | Developing a Predictive App for Water Quality: Modeling E. Coli Quantification Through Spatiotemporal Variables |

Student(s) Chloe Chang **Grade** 11 **Town** Orange

Conn. Science & Engineering Fair

Special Award Winners

[SchTown]   **[School]**   **[Teacher]**
  [Proj#] **[FCat]** **[Project Title]**

Woodbridge   Amity Regional High School   Sarah Reeves

| 3180 | LS | Determining the Accuracy of Biomarker TNF-α in Predicting Ketamine Treatment Outcomes for Veterans with PTSD & MDD |

        Student(s) Mila Mejnartowicz   **Grade** 12   **Town** Woodbridge

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Woodbridge   Amity Regional High School   Lindsay McCarthy

| 6012 | PS | Developing a Bio-Hybrid Luminescent Solar Concentrator Using Carbon Quantum Dots, Natural Fluorophores, and Kaolin Powder for Enhanced Solar Energy Harvesting |

        Student(s) Aryan Shrivastav   **Grade** 11   **Town** Orange