

# Connecticut Science & Engineering Fair

## Quinnipiac University

March 3 - 15, 2025

These judging results are unaudited by the fair's Database Committee. The CSEF reserves the right to correct the listings.

### Final Judging Results

#### Award Legend

Plaque Winners = 1, 2, ...  
Medalists = m  
Winners = w

## Computer Science Awards

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

### Middle School

**Wilton** Middlebrook School Debbie Mallozzi

5507 P8 Bus Notification System with Raspberry Pi

**Award** 1 **Student(s)** Vedit Prabhu **Grade 8** **Town** Wilton

- \* Connecticut Science Fair Association Physical Science Awards with CMS Dorothy Minervino --- 2nd Place- Physical Sciences 8th Grade Ind. - \$150 & trophy
- \* Infosys Foundation Computer Science Awards --- 1st Place Middle School - \$200, Trophy
- \* Pepsico Engineering Awards --- 1st Place- Engineering Middle School- \$200 & trophy
- \* Quinnipiac University Scholarships --- \$30,000, 4 year scholarship (\$7500 per year) to Quinnipiac U. - MS Student in Computing
- \* Thermo Fisher Scientific Junior Innovators Challenge --- Nomination to compete in the Thermo Fisher Scientific JIC for selected top MS winners
- \* IEEE William R. Wessman Awards --- \$100 Honorable Mention
- \* Society of Women Engineers - Hartford Section --- Scientific Calculator
- \* National Center for Inquiry Learning --- Daniel & Maggie Award for Imagination - MS \$100

**Danbury** Westside Middle School Academy Nancy Barlow

5528 P8 The Benefit of A Coded Device To Water Plants Automatically

**Award** 2 **Student(s)** Mackenzie Cooper **Grade 8** **Town** Danbury

- \* Petit Family Foundation Women in Science & Engineering Awards --- 2nd Place- Middle School- \$150 / trophy
- \* Urban School Challenge Awards with Connecticut Academy of Science & Engineering and OTIS --- 1st Place Middle School - \$200 and Trophy, Medallion
- \* Infosys Foundation Computer Science Awards --- 2nd Place Middle School - \$150, Trophy
- \* Connecticut Academy of Science and Engineering Middle School Urban School Challenge Award --- Urban School Challenge 1st MS- \$250 Cash Award, Invite to attend CASE's Annual Meeting
- \* Thermo Fisher Scientific Junior Innovators Challenge --- Nomination to compete in the Thermo Fisher Scientific JIC for selected top MS winners
- \* GENIUS Olympiad --- GENIUS Olympiad Competition for Highest Placing USC 8th grade Project

**Greenwich** Eastern Middle School Andrew Bramante

2521 L8 Unraveling Weather-Pollen Interactions: Machine Learning for Allergy Forecasting

**Award** 3 **Student(s)** Siddharth Nimmagadda **Grade 8** **Town** Greenwich

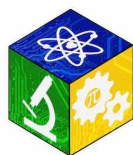
- \* Connecticut Science Fair Association Life Science Awards with The Jackson Laboratory --- 3rd Place- Life Sciences 8th grade- \$100 & trophy
- \* Infosys Foundation Computer Science Awards --- 3rd Place Middle School- \$100, Trophy

**Avon** Talcott Mountain Academy Hannah Marye

5508 P8 The impact of 3D-printed low-cost quadrupedal robots using swarm mechanics on highway litter cleaning services

**Award** m **Student(s)** Kwabena Addai - Boateng **Grade 8** **Town** East Hartford

- \* Stanley Black & Decker Applied Technology Awards --- Middle School Finalist - Medallion
- \* Infosys Foundation Computer Science Awards --- Middle School Finalist - Medallion



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### High School

**Greenwich** Greenwich High School Andrew Bramante

3152 LS Real-Time Diagnosis and Alert of Computer Vision Syndrome, to Promote Healthy Screen-Time Habits  
Award 1 Student(s) Arnav Bhatia Grade 10 Town Old Greenwich

\* Infosys Foundation Computer Science Awards --- 1st Place High School - \$300, Plaque

**Windsor** The Loomis Chaffee School Koby Osei

6098 PS A Multi-Modal Modular Robotic System: Self-Assembly and Navigation in Complex Terrains  
Award 2 Student(s) Michael Ma Grade 9 Town Medina

\* Connecticut Science Fair Association Physical Science Awards with CMS Dorothy Minervino --- 4th Place- Physical Sciences Senior High Individual - Plaque  
\* Infosys Foundation Computer Science Awards --- 2nd Place High School - \$200, Plaque  
\* IEEE William R. Wessman Awards --- \$100 Honorable Mention

**Greenwich** Greenwich High School Andrew Bramante

3146 LS Leveraging of Neural Network Design to Create High-Accuracy, Low-Latency Detection of Real-time  
Award 3 Student(s) Ryan Wadhwa Grade 11 Town Riverside

\* Connecticut Science Fair Association Life Science Awards with The Jackson Laboratory --- Finalist - Life Science Senior High - CSF Medallion  
\* Infosys Foundation Computer Science Awards --- 3rd Place High School- \$100, Plaque

**Avon** Avon High School Galuska Andrea

3132 LS Pathonix: Enhancing Ovarian Cancer Detection with an Explainable and Efficient Ensemble Learning Framework  
Award m Student(s) Vishnu Mukku Grade 10 Town Avon

\* Connecticut Science Fair Association Life Science Awards with The Jackson Laboratory --- Finalist - Life Science Senior High - CSF Medallion  
\* Pfizer Computational Biology and Bioinformatics Awards --- Senior High Finalist - Medallion  
\* Infosys Foundation Computer Science Awards --- Senior High Finalist - Medallion

**Bridgeport** Bridgeport Regional Aquaculture Center Kirk Shadle

6043 PS Using Swarm Artificial Intelligence to Generate Artificial Human Genomes  
Award m Student(s) Alexander Haniph Grade 12 Town Trumbull

\* Infosys Foundation Computer Science Awards --- Senior High Finalist - Medallion

**Cheshire** Cheshire Academy Breanna Craft

6013 PS A Tracking System.  
Award m Student(s) Deanna Dixon Grade 11 Town Cheshire

\* Stanley Black & Decker Applied Technology Awards --- Senior High Finalist - Medallion  
\* Infosys Foundation Computer Science Awards --- Senior High Finalist - Medallion  
\* Pepsico Engineering Awards --- Finalist - Engineering High School - CSF Medallion  
\* Society of Women Engineers - Hartford Section --- Scientific Calculator



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**Cheshire** Cheshire High School Julie Barker

6064 PS Chemical Clues: Predicting Cytochrome P-450 Inhibitors

**Award** m **Student(s)** Adwitha Gadhachanda **Grade** 11 **Town** Cheshire

\* Infosys Foundation Computer Science Awards --- Senior High Finalist - Medallion

**Cheshire** Cheshire High School Julie Barker

6058 PS The Design and Development of a Smart and Effective Multi-Device Airline Seatbelt Alert System for Preventing Turbulence-Related Injuries Using IoT Technology

**Award** m **Student(s)** Suchita Srinivasan **Grade** 11 **Town** Cheshire

\* Connecticut Science Fair Association Physical Science Awards with CMS Dorothy Minervino --- Finalist - Physical Sciences Senior High - CSF Medallion

\* Infosys Foundation Computer Science Awards --- Senior High Finalist - Medallion

\* Office of Naval Research- U.S. Navy / U.S. Marine Corps --- High School- Certificate, \$75.00 gift card given by ONR

\* Connecticut Invention Convention "Next Step Inventors" --- Next Step Inventor Trophy & Invitation to compete at the 2025 Invention Convention, May 3

**Danbury** Wooster School Parvin Taraz

6077 PS CTRQNs & LQNs: Continuous Time Recurrent and Liquid Quantum Neural Networks

**Award** m **Student(s)** Alejandro Mayorga **Grade** 10 **Town** Danbury

\* Connecticut Science Fair Association Mathematics Awards --- 1st Place High School- \$300 and Plaque

\* Infosys Foundation Computer Science Awards --- Senior High Finalist - Medallion

**East Lyme** East Lyme High School Frederic Clark

3059 LS SleepWatcher

**Award** m **Student(s)** Sashrika Das **Grade** 9 **Town** East Lyme

\* Infosys Foundation Computer Science Awards --- Senior High Finalist - Medallion

**Greenwich** Greenwich High School Andrew Bramante

6051 PS Development of a Novel Deep Reinforcement Learning Algorithm for Decentralized Real-Time Control of Autonomous Drones with Hardware-Independent Compatibility

**Award** m **Student(s)** Henry Jin **Grade** 11 **Town** Greenwich

\* Infosys Foundation Computer Science Awards --- Senior High Finalist - Medallion

\* Pepsico Engineering Awards --- Finalist - Engineering High School - CSF Medallion

**Greenwich** Greenwich High School Andrew Bramante

3011 LS A Novel Multi-Modal ML Approach for Early Detection of Alzheimer's Disease Using Clinical, Genetic, and MRI Modalities

**Award** m **Student(s)** Keen-Yin Woo **Grade** 11 **Town** Riverside

\* Connecticut Science Fair Association Life Science Awards with The Jackson Laboratory --- 3rd Place- Life Sciences Senior High- \$100 & Plaque

\* Pfizer Computational Biology and Bioinformatics Awards --- 2nd Place High School - \$200, Plaque

\* Infosys Foundation Computer Science Awards --- Senior High Finalist - Medallion



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[Proj#] [FCat] [Project Title]

**New Haven** Engineering and Science University Magnet School Paula Matei-Grysiak

3003 LS Implementation and Validation of a Novel Machine-Learning-Based Mobile Gyrocardiography System for Arrhythmia Detection

**Award** m **Student(s)** Ethan Joseph **Grade** 10 **Town** West Haven

- \* Connecticut Science Fair Association Life Science Awards with The Jackson Laboratory --- Finalist - Life Science Senior High - CSF Medallion
- \* Pfizer Computational Biology and Bioinformatics Awards --- Senior High Finalist - Medallion
- \* Urban School Challenge Awards with Connecticut Academy of Science & Engineering and OTIS --- 1st Place High School - \$300 and Plaque, Medallion
- \* Infosys Foundation Computer Science Awards --- Senior High Finalist - Medallion
- \* H. Joseph Gerber Award of Excellence presented by the Connecticut Academy of Science and Engineering --- \$500 to 1st HS Urban School Challenge Science Department for Equipment/Supplies
- \* The Community Foundation for Greater New Haven's Milton Fisher Awards for Innovation and Creativity --- For Excellence in Creativity and Innovation by a High School student, \$100 cash

**Redding** Joel Barlow High School Paul Testa

3122 LS AI Prediction: Randomized Clinical Trial Enrollment

**Award** m **Student(s)** Arianna Pereira **Grade** 11 **Town** easton

- \* Infosys Foundation Computer Science Awards --- Senior High Finalist - Medallion

**Redding** Joel Barlow High School Paul Testa

6059 PS Evaluating Market Efficiency Through Deep Learning: A Performative Analysis of LSTM Neural Networks, Actor-Critic Reinforcement Learning Models, and Technical Indicators

**Award** m **Student(s)** Brian Weiss **Grade** 11 **Town** Redding

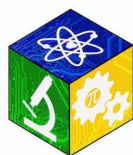
- \* Connecticut Science Fair Association Mathematics Awards --- 2nd Place High School- \$200 and Plaque
- \* Infosys Foundation Computer Science Awards --- Senior High Finalist - Medallion

**South Windsor** South Windsor High School Danel Eitel

6047 PS OatNET: Novel Neural Network architecture & mathematical model for reducing Dense Layer computational complexity via ternary weight decomposition & rank-1 magnitude approximation.

**Award** m **Student(s)** Karthik Srikumar **Grade** 10 **Town** South Windsor

- \* Connecticut Science Fair Association Physical Science Awards with CMS Dorothy Minervino --- 2nd Place- Physical Sciences Senior High Individual - \$200 & Plaque
- \* Connecticut Science Fair Association Mathematics Awards --- High School Finalist - Medallion
- \* Infosys Foundation Computer Science Awards --- Senior High Finalist - Medallion
- \* Quinnipiac University Scholarships --- \$30,000, 4 year scholarship (\$7500 per year) to Quinnipiac U. - HS Student in Computing
- \* Maplesoft Awards for Applied Mathematics and Modeling --- Maple software, , gift packs, & T-shirt - For Excellence in Mathematics



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**Stamford** King School Victoria Schulman

6057 PS LungSCOPE: A Multimodal Machine Learning-Based Framework for Overall Survival Prediction in Non-Small Cell Lung Cancer

**Award** m **Student(s)** Parker Hayashi **Grade** 12 **Town** Riverside

- \* Connecticut Science Fair Association Physical Science Awards with CMS Dorothy Minervino --- Finalist - Physical Sciences Senior High - CSF Medallion
- \* Pfizer Computational Biology and Bioinformatics Awards --- Senior High Finalist - Medallion
- \* Infosys Foundation Computer Science Awards --- Senior High Finalist - Medallion
- \* Pepsico Engineering Awards --- Finalist - Engineering High School - CSF Medallion

**Stamford** King School Victoria Schulman

6001 PS Making a Real-Time Water Quality Monitor

**Award** m **Student(s)** Sowa Laryea-Adjei **Grade** 11 **Town** Stamford

- \* Connecticut Science Fair Association Physical Science Awards with CMS Dorothy Minervino --- Finalist - Physical Sciences Senior High - CSF Medallion
- \* Infosys Foundation Computer Science Awards --- Senior High Finalist - Medallion

**Stamford** Laurel Springs School Vera Ulanovskaya

6046 PS Research on Autoimmune Disease Spectrometer (RAD-Spec): A Machine Learning-Based Application for Improving Accessibility to Autoimmune Research

**Award** m **Student(s)** Victoria Makarov **Grade** 11 **Town** Stamford

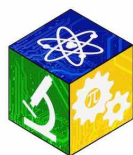
- \* Connecticut Science Fair Association Physical Science Awards with CMS Dorothy Minervino --- Finalist - Physical Sciences Senior High - CSF Medallion
- \* Infosys Foundation Computer Science Awards --- Senior High Finalist - Medallion
- \* Robert Francoeur Memorial Awards --- Creative or innovative project in engineering, computer science or mathematics by female students - \$100

**Windsor** The Loomis Chaffee School Larry Brackney

6520 PST Alternative Drivetrain System for Better Efficiency in FIRST Tech Challenge Robots

**Award** m **Student(s)** Emma Chu **Grade** 11 **Town** Ludlow  
Yejoon Kwon **Grade** 11 **Town** Saratoga

- \* Connecticut Science Fair Association Physical Science Awards with CMS Dorothy Minervino --- Finalist - Physical Sciences Senior Team - CSF Medallion
- \* Stanley Black & Decker Applied Technology Awards --- Senior High Finalist - Medallion
- \* Infosys Foundation Computer Science Awards --- Senior High Finalist - Medallion
- \* Pepsico Engineering Awards --- Finalist - Engineering High School - CSF Medallion



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[Proj#] [FCat] [Project Title]

**Windsor** The Loomis Chaffee School Koby Osei-Mensah

6002 PS A Stroke of Genius: Applying Smart Wearable Technology to Record and Improve Freestyle Stroke in Competitive Swimmers

**Award** m **Student(s)** George Mirgorodskiy **Grade** 11 **Town** San Mateo

- \* Connecticut Science Fair Association Physical Science Awards with CMS Dorothy Minervino --- Finalist - Physical Sciences Senior High - CSF Medallion
- \* Stanley Black & Decker Applied Technology Awards --- 2nd Place High School - \$200 and Plaque Medallion
- \* Infosys Foundation Computer Science Awards --- Senior High Finalist - Medallion
- \* Electric Boat Management Association Science and Engineering Research Awards --- Top Prize in Nautical Research - \$200 Cash for top project that has innovative nautical applications

**Woodbridge** Amity Regional High School Jacob Storeygard

6048 PS Using physics-based machine learning models to adjust flow rates of Herschel-Bulkley fluids in Direct Ink Writing 3D printing processes

**Award** m **Student(s)** Jacob Storeygard **Grade** 11 **Town** Woodbridge

- \* Infosys Foundation Computer Science Awards --- Senior High Finalist - Medallion