

#	Title	Authors with affiliation and country
1570698087	Novel application to improve communication for children affected by Autism Spectrum Disorder	Veda R Murthy (Rachel Carson School, USA)
1570698823	An Autonomous Driving Simulation Platform as a Virtual HSAVC Competition Environment	Daren Hua (Eleanor Roosevelt High School, USA)
1570702215	Desalination and Purification of Water using a Solar Powered Hydrogel Multistage	Kevin A Murphy (PRISMS, USA)
1570702254	Comparing Grover's Quantum Search Algorithm with Classical Algorithm on Solving Satisfiability Problem	Runqian Wang (Princeton International School of Math and Science, USA)
1570702388	"Making a mechanical hand with plastic drinking straws."	Sowmya Natarajan (Whittle School and Studios, USA)
1570702418	Predictive Analytics in Agriculture using Geospatial Mapping	Sreya Jonnalagadda (Princeton International School of Mathematics and Science, USA)
1570702445	Household 3D Cream Printer for Cake Decoration	Junjing Zeng (Branksome Hall, Canada); Fangzhou Xia (Massachusetts Institute of Technology, USA)
1570702613	Low-cost Portable Ventilator Design for Underdeveloped Regions	Rui Wang (High School Affiliated to Renmin University of China); Fangzhou Xia (Massachusetts Institute of Technology, USA)
1570702690	Water purification for human consumption	Sumanth R Moole (Thomas Jefferson High School for Science and Technology, USA)
1570702706	Comparison of effectiveness of Machine Learning algorithms for Vehicle Path Prediction	Sumanth R Moole (Thomas Jefferson High School for Science and Technology, USA)
1570702716	Faraday's Motor and Electromagnetism	Vanisha S Nagali and Saniya Nagali (Allentown High School, USA)
1570702724	Roy. G. Biv: The Color Matching Application for Artists With Limited Pigments	Nina M Borodin, Sylvan Martin and Ryan Sokolowsky (Reservoir High School, USA)
1570702792	Covid-19 Case Prediction using Nesting Fitting	Bomin Wei (Princeton International School of Mathematics and Science, China)
1570702801	Identifying the Impacts of Digital Technologies on Labor Market: A Case Study in the Food Service Industry	Zeyi Ma (Beijing National Day School, China); Lufan Wang (Florida International University, USA)
1570702844	Wheeled Jumping all-terrain drones with Combustion-driven Semi-active Suspension	Leonard Yu (Princeton International School of Math and Science, USA)
1570702867	Analyzing Sex-Biased Gene Expression in Autoimmune Diseases	Vidyadhari Vedula (Princeton International School of Mathematics and Science, USA)

1570702897 Analysis and Construction of a Small International High School's Social Network	Daniella Reyes (Princeton International School of Mathematics and Science, USA)
1570702899 The Floating Compass: A Demonstration of Electromagnetism and Lenz's Law	Helena Rittenhouse (Princeton University EPICS, USA)
1570702905 Effects of Protein Concentration in Fish Feed on Physical and Chemical Water Pollution	Indeever Madireddy (BASIS Independent Silicon Valley, USA)
1570702906 An Exploration Into Electromagnetic Generation	Kritika R Ravichander (8 Sweetbriar Court, USA)
1570702916 Exposure to Navajo through Game Development: Guess the Number	KayDence N Low Dog (Navajo Preparatory School, USA); Jude J Thomas (Navajo, USA); Kritika R Ravichander (8 Sweetbriar Court, USA)
1570702917 Navajo Language Preservation AI	Nalanaya N Austin and Tymerah R Chischilly (Navajo Preparatory School, USA)
1570702918 Zoetrope Abstract by Anish Chaganti	Anish Chaganti (JP Stevens High School, USA)
1570702920 Edison High School WiSTEM FOCUS: Addressing Female Underrepresentation in STEM	Vasumathi Venkat (Edison High School & WiSTEM FOCUS club, USA); Ishani Kunadharaju (Edison High School & WiSTEM FOCUS club, USA)
1570702923 Navajo Code Talker Game	Nathan A Henry (USA)
1570702924 Teaching the Navajo Language Through a Coded Game	Yilnazbah R Wauneka-Yellowhorse (414 Julie Dr & BlueCross BlueShield, USA); Jordyn Begay and Jaci Hood (Navajo Preparatory School, USA); Richard J Wegmann (USA); Alana E Smith (Navajo Preparatory School, USA)
1570702928 The application of precision medicine for diabetes treatment	Ziqi Ma (Beijing Royal School, China)
1570702929 Franklin's Bells: Converting Electrical Energy Into Continuous Mechanical Motion	Stella C Firmenich (Engineering Projects In Community Service, Princeton University & Stuart Country Day School of the Sacred Heart, USA)
1570702930 A Design of the Extrusion System for Chocolate 3D Printing	Hong Jiang (Princeton International School of Mathematics and Science, China)
1570702934 Static Straw Spinner	Gabriel Saintil (The Pingry School Basking Ridge, USA); Hunter Jushchuk (Rutgers Preparatory, USA)
1570702935 High School STEM Clubs In A Virtual World	Anastasia A Ibrahim (Edison High School & iSTEM Club, USA); Sunrit Panda (Edison High School & TEDxEdisonHighSchool, USA); Gunjan Adya (Edison High School & iSTEM Club, USA)

1570702937 TEDxEdisonHighSchool: A Template For Virtual TEDx Conferences	Sunrit Panda, Neoma A Chowdhury and Aditi Deshmukh (Edison High School & TEDxEdisonHighSchool, USA)
1570703791 Enhancing Chess Engine with a Personalized Quantitative Database	Jiasen Liu (Princeton International School of Math and Science, China)
1570703792 Using hashing to improve efficiency in cross-image duplicate detection in research publications	Tongyu Lu (Princeton International School of Mathematics and Science, China)
1570704241 Golden Ratio Lettuce	Bela Sameep Sanghavi (1312 Ashton Falls Drive & O'Fallon Township High School, USA)
1570704247 Interactive At-Home Learning	Anishi R Desai (William Fremd Highschool & None, USA)
1570704248 Fun of Physics	Kayla Desai (Fremd, USA)
1570704251 Consumer Barriers For The Adoption Of Climate Friendly Packaging In Mercer County	Inara D Jain (Princeton High School, USA)
1570704288 Application for Individualized Learning Using Artificial Intelligence	Anant Gupta (Great Neck South Middle School, USA)
1570704465 Smart Education Supply Preparedness	Adrik Ray (Huber Street Elementary School, USA)
1570705055 Lego Robot for Guiding the Blind	Rishi Balaji (Gates Elementary School, USA)
1570705143 Fibonacci Lemonade	Arden Upadya (Morristown Beard School, USA)
1570705234 Design and Testing of Solar Power Heating	Victor I Robila (Hunter College High School, USA)
1570705470 A Review of the Relationship Between Diabetes and Diabetic Amputations in the United States: An Expensive, Chronic but Preventable Condition	Gabrielle Rose Kiewe (Massachusetts Institute of Technology, USA); Hugh Herr (MIT-Harvard, USA); Francesca B Riccio-Ackerman, Aaron Jaeger and Daniel Levine (Massachusetts Institute of Technology, USA)
1570705622 Photophone Re-invented	Roshan S Natarajan (Whittle School and Studios, USA)
1570705707 The Science Behind Flappy Bird	Steven S Santos (Johns Hopkins Applied Physics Lab, USA)
1570705708 Exploring ethics in IoT-based smart cities	Michelle S Feng (The Bryn Mawr School & Johns Hopkins University Applied Physics Laboratory, USA); Jeffrey Chavis (Johns Hopkins University Applied Physics Laboratory, USA)
1570705749 The Math Behind Piano Chords	Zuko A Ranganathan (Hart Magnet School, Stamford CT, USA)
1570705770 IoT & Smart Cities: "Smartainability"	Malcolm K Doster, Jr. (Charles Herbert Flowers High School, USA); Jeffrey Chavis (Johns Hopkins University Applied Physics Laboratory, USA)

1570705775	The Fibonacci Sequence and The Golden Ratio in Math and Music	Nicole E Vassilev (Princeton High School, USA)
1570705776	Sensitivity of Voter Turnouts in Presidential Elections - A Retrospective Analysis	Kavin S Sankar (Enloe High School, USA)
1570705784	Smart City Overview	Syeda J Zeeshan (Atholton High School, USA); Jeffrey Chavis (Johns Hopkins University Applied Physics Laboratory, USA)
1570705785	Diagnosing Skin Cancer Using Artificial Intelligence and Machine Learning	Riya J. Roy (Ridge High School, USA)
1570705788	Filtere - Filtering water using a variety of efficient filtration methods	John Tewolde (Grand Blanc Community Schools, USA); Joshua Tewolde (Grand Bland West Middle School, USA); Girma Tewolde (Kettering University, USA)
1570705789	Using Technology as a Means for Musical Outreach to Nursing Home Residents	Joshua Tewolde (Grand Bland West Middle School, USA); John Tewolde (Grand Blanc Community Schools, USA); Girma Tewolde (Kettering University, USA)
1570705793	Automated Classification and Conceptualizing 3D Shape, Texture, and Pose of Wildlife in Camera Trap Imagery for Enhanced Conservation Efforts	Thomas Y Chen (Academy for Mathematics, Science, and Engineering, USA)
1570705795	Impact of Black Lives Matter Movement on the LGBTQ Movement in Other Countries: A Comparative Study	Hyunwoo Kwon (Rise Research Group, USA); Andrew Kyung (NVRHS, USA)
1570705803	Eddy Current Pendulum Brake	Edward Rossi Banfe (Princeton High School & Engineering Projects In Community Service, USA)
1570705804	Utilizing Computer Vision for Natural Disaster Relief Efforts from Satellite Imagery	Thomas Y Chen (Academy for Mathematics, Science, and Engineering, USA)
1570705806	Study on the Time-scale Separation in Communities Networks with Consensus Dynamics	Amanda Kyung and Andrew Kyung (NVRHS, USA)
1570705807	The Use of Optimization and Derivatives in Calculus to Create More Sustainable Food Packaging	Kyle Mayers (The Lawrenceville School, USA)
1570706655	Study on the Metal Organic Frameworks(MOFs) for the Treatment of Pancreatic Cancer	Amanda Kyung (NVRHS, USA)
1570706738	Classification of Skin Phenotype: Melanoma Skin Cancer	Ayushi Kumar (Monroe Township High School, Monroe Township, NJ, USA); Ari Kapelyan (Bergen County Academies, Hackensack, NJ, USA); Avimanyou K Vatsa (Fairleigh Dickinson University, Teaneck, USA)

1570706739 Understanding Complex Malware

Daniel Edis (1Bergen County Technical High School,
Teterboro, NJ, USA); Taylor Hayman (Fairleigh Dickinson
University, Teaneck, NJ, USA); Avimanyou K Vatsa (Fairleigh
Dickinson University, Teaneck, USA)

1570706744 Magnetic Levitation in Motion

Jesse Miller (USA)