

Accepted Full Papers

1570780228	An interdisciplinary approach to high school curriculum development: Swarming Powered by Neuroscience	Elise Buckley (Johns Hopkins University Applied Physics Laboratory, USA); Joseph Monaco (Johns Hopkins University School of Medicine, USA); Kechen Zhang (Johns Hopkins University, USA); Kevin Schultz (JHU/APL, USA); Robert Chalmers and Armin Hadzic (Johns Hopkins University Applied Physics Laboratory, USA); Grace M Hwang (Johns Hopkins Applied Physics Laboratory & National Science Foundation, USA); M. Dwight Carr (Johns Hopkins University Applied Physics Laboratory, USA)
1570782094	Extracurricular Student-Centered Projects to Learn Computer Programming	Wei Yu, William Haynes and Diane DiMassa (Massachusetts Maritime Academy, USA)
1570782259	Design and Development of a Smart Cities General Education Online Course for Undergraduates	Mohammad U. Mahfuz (University of Wisconsin-Green Bay, USA)
1570782769	Design and Development i-AVEN GER as High-Tech Virtual Remote Teaching and Learning Platform with Experienced Based Learning and Self-regulated Learning Approaches in facilitating STEAM Education	Ken Nee Chee (Universiti Pendidikan Sultan Idris, Malaysia); Noraffandy Yahaya (Universiti Teknologi Malaysia, Malaysia); Mohd Hishamuddin Abdul Rahman (Universiti Pendidikan Sultan Idris, Malaysia); Rafiza Abdul Razak (University Of Malaya, Malaysia); Nor Hasniza Ibrahim (Universiti Teknologi Malaysia, Malaysia)
1570783875	Automated Car applying Artificial Intelligence	Satyam Mishra (Vietnam National University - International School, Vietnam)
1570785195	A Personality Types Research Study Based on Personal Values in an Ethics Course for the Engineering and Computer Sc. Undergraduates	Atma Sahu (Coppin State University, USA)
1570785283	Motivating Potential of the ESP Course Themes at Russian University of Transport	Natalya V Matveeva (Russian University of Transport & Serpukhov College, Russia); Elena Fedotkina (Russian University of Transport, Russia)
1570785297	Immersive-Experiential Business-Technology in Simulated Business Cases	Stephen Andriole (Villanova University, USA)
1570785462	Pandemic and Natural Disasters Driving the Need for AI Driven NEXTGen Medical Services	John Lamb (Pace University, USA); David Marimekala (Farmington High School, CT, USA)
1570785650	Assurance of Learning in Technology Management by Curriculum Alignment to A Professional Body of Knowledge	Andres Fortino and Ming Cai (NYU, USA)

1570785678	An Integrated Approach to Sustainability-focused Instruction in Undergraduate Engineering Curricula	Mohammad U. Mahfuz (University of Wisconsin-Green Bay, USA)
1570785748	Acknowledging Perceptions, Behaviors, and Beliefs: Exploring What Faculty Need to Integrate Technology into Instruction in Qatar	Ibrahim M Karkouti (The American University in Cairo, Egypt)
1570786107	Reading in the Dark - Radar Imaging Demonstrator for STEM Outreach of Autonomous Systems	Michael A Saville, Ryan Ball, Garrett Harris and Sarah Willenbrink-Sahin (Wright State University, USA)
1570786218	A New System for designing a 'Student Aide' Application	Ira Nath (JIS College of Engineering, India)
1570786980	Project-Based Exploration of Cluster Computing and Parallelization Using Raspberry Pis	Taylor R Powell, Ayman Elmesalami and Soad Ibrahim (Old Dominion University, USA)
1570787039	A Semantic Text Processing System for Free-Write English Papers	Ryan DePascale and Stefan Robila (Montclair State University, USA)
1570787057	Building Student Engagement in Mathematics with Interdisciplinary Study of Voting Systems	Teresa Piliouras (TCR, Inc., USA); Aaron Kershenbam (University of Pennsylvania, USA); Robert Schiaffino (Iona College, USA); Steffi Crasto (TCR, Inc., USA)
1570787312	Impact of Student Research in Engineering: Case Study of a Non-Doctoral University in the Arab World	Sawsan Samir El-Zahr (Lebanese American University, Lebanon)
1570787316	Quality, Quantity and Impact in Engineering Research: Case Study of a Non-Doctoral University in the Arab World	Sawsan Samir El-Zahr (Lebanese American University, Lebanon)
1570787388	Synchronous Online Army Educational Research Program for High School Students	Anitha Sarah Subburaj (West Texas A&M University, USA); Ilham Osman (Design Release Engineer, Electrification Power Conversion Release, General Motors, Michigan, USA); Gail Alleyne Bayne and Stephen Bayne (Texas Tech University, USA)
1570787433	Identifying Students' Progress and Mobility Patterns in Higher Education Through Open-Source Visualization	Ali Oran (Brigham and Women's Hospital, USA); Andrew Martin, Michael Klymkowsky and Robert Stubbs (University of Colorado, Boulder, USA)
1570787447	Blockchain-based Electronic Voting System for Modern Democracy: A Review	Dylan Weiss and Jacob Wolmer (Tenafly High School, USA); Avimanyou K Vatsa (Fairleigh Dickinson University, Teaneck, USA)
1570787533	Understanding Natural Disasters Through Participatory Simulations: A Pilot Study	Patricia M. Davies (Prince Mohammad Bin Fahd University, Saudi Arabia)

1570787549	Visual Navigation for Autonomous Vehicles: An Open-source Hands-on Robotics Course at MIT	Luca Carlone (MIT, USA); Kasra Khosousi (CSIRO, Australia); Vasileios Tzoumas (University of Michigan, USA); Golnaz Habibi (University of Oklahoma, USA); Markus Ryll (Technical University of Munich, Germany); Rajat Talak, Jingnan Shi and Pasquale Antonante (MIT, USA)
1570787565	Educating educators on social engineering: Experiences developing and implementing a social engineering workshop for all education levels	Katorah N. Williams, Rachel Bleiman and Aunshul Rege (Temple University, USA)
1570787581	Identification of Important Factors in Digital Citizenship Learning Curriculum	Alex Budiyanto (University of Indonesia & Indonesia Cloud Computing Association, Indonesia)
1570787627	Challenges and good practices in STEM: a systematic review and implications for higher education institutions	Eirini Christou (CUT, Cyprus); Antigoni Parmaxi (Cyprus University of Technology, Cyprus); Anastasios A. Economides and Maria Perifanou (University of Macedonia, Greece); Maryna Manchenko and Jelena Mazaj (CESIE, Italy)
1570787638	Understanding Obstacles in the STEM Career Pipeline through System Dynamics Modeling	Daniel C Appel (US Air Force Research Laboratory, Kirtland AFB, NM & AEGIS Technologies Group Inc., USA); Carla Winsor (University of Wisconsin-Madison, USA); Ralph Tillinghast (US Army & CCDC Armaments Center, Picatinny Arsenal, NJ, USA); Mo Mansouri (Stevens Institute of Technology & University of South-Eastern Norway, USA)
1570787664	Adapting a STEM Robotics Program to the Covid-19 Pandemic - a validation of the proposal presented at ISEC in 2021	Neville E. Jacobs (IEEE Baltimore Section, USA); Eric V Sudano (Eric V. Sudano System Solutions LLC, USA)
1570787668	Developing surveillance applications with Raspberry Pi, Django, and cloud services	Ravi Rao (Fairleigh Dickinson University)
1570787675	Integrating Theory and Practice in Undergraduate Education through the Design and Implementation of Pin-Based Multi-Robot Manipulators	Kyle Pichney, Andrew Romero and Yancy Diaz-Mercado (University of Maryland, USA)
1570787676	Role of Interdisciplinarity and Collaboration in Engineering Design Curriculum	Olivia Hall and Deeksha Seth (Villanova University, USA)
1570787678	A survey of student motivations for enrolling in engineering and technology undergraduate programs	Ravi Rao (Datavani, USA)
1570787689	Closed Loop Digitally Controlled Power Supply Analysis and Design with Register Level Coding Emphasis	John Tsinetakes (Drexel University & Lockheed Martin, USA)

1570787691	Undergraduate research: Cyclostationary plot classification using machine learning	Sanish Rai (West Virginia University Institute of Engineering, USA)
1570787697	Integrating Animation and Game-making in Teaching JavaScript	Shuting Xu, Shuhua Lai and Lissa Pollacia (Georgia Gwinnett College, USA)
1570788750	Influence of GFP GAN on Melanoma Classification	Ayushi Kumar (Monroe Township High School, Monroe Township, NJ, USA); Avimanyou K Vatsa (Fairleigh Dickinson University, Teaneck, USA)
1570789112	One Degree of Freedom Copter Design and Control using Smart and Simple PID Controller	Zeyad A. Karam and Elaf Saeed (Al-Nahrain University, Iraq)
1570789128	Wireless Body Area Networks (WBANs) Applications Necessity in Real Time Healthcare	Reza Khalilian (Islamic Azad University of Majlesi, Iran & Dr Vita Company, Iran); Abdalhossein Rezai (University of Science and Culture, Iran)
1570789522	Noise Removal of ECG Signal Using Multi-Techniques	Heyam A. Marzog (Al-Furat Al-Awsat University, Iraq); Aws Zuheer Yonis (Ninevah University, Iraq)
1570789895	Training-Free Lane Tracking for 1/10th Scale Autonomous Vehicle Using Inverse Perspective Mapping and Probabilistic Hough Transforms	Mihir Rao (Chatham High School, USA); Laura Paulino (Montclair State University, USA); Victor I Robila (Hunter College High School, USA); Iris Li (Milburn High School, USA); Michelle M. Zhu and Weitian Wang (Montclair State University, USA)
1570790920	Tracking Technology Trends using Text Data Mining	Andres Fortino and Yiyang You (NYU, USA)
1570793038	FedNet: Federated Implementation of CNNs for Facial Expression Recognition	Md. Saiful Bari Siddiqui (BRAC University & Bangladesh University of Engineering & Technology, Bangladesh); Sanjida Ali Shusmita and Shareea Sabreen (BRAC University, Bangladesh)
1570793974	Segmentation Techniques in Iris Recognition Systems	Ruaa Waleed and Mayada Faris Ghanim (University of Mosul, Iraq)
1570787659	Quantitative Study on the Anxiety Level of High School Students in Pandemic Life	Mofei Shen (USA)
1570793572	Transmission Line Fault Detection Using Wavelet Transform & ANN Approach	Jivitesh Nitin Chavan and Atul Kale (A C Patil College of Engineering, Khargar, Navi Mumbai, India); S Deore (University of Mumbai, India)
1570793676	Performance Analysis of Kalman Filter as an Equalizer in a non-Gaussian environment	Ly Vu (International University, Vietnam)

1570793764	Artificial Intelligence (AI) as a computerized decision aid for selection of candidates in higher education	Ravi Kumar V v (Symbiosis Institute of Business Management, Pune, India & Symbiosis International, Deemed University, Pune, India); Ramakrishnan Raman (Symbiosis Institute of Business Management Pune & Symbiosis International University India, India)
1570794187	Student Perceptions on Artificial Intelligence (AI) in higher education	Ravi Kumar V v (Symbiosis Institute of Business Management, Pune, India & Symbiosis International, Deemed University, Pune, India); Ramakrishnan Raman (Symbiosis Institute of Business Management Pune & Symbiosis International University India, India)
1570794214	Network Communication Intrusion Detection and Classification Security Techniques	Aws Zuheer Yonis (Ninevah University, Iraq)
1570794291	Using Statistical Decision Making for a University Examination Scenario	Vijayakumar Bharathi. S (Symbiosis Centre for Information Technology (SCIT) & Symbiosis International University, India); Dhanya Pramod (Symbiosis Centre for Information Technology, India); Ramakrishnan Raman (Symbiosis Institute of Business Management Pune & Symbiosis International University India, India)
1570794475	Competitive study on public and private key usage in Voice over Internet Protocol	Aws Naser Jaber Al-Zarqawee (Pilestredet 35, Norway & Oslo Metropolitan University (OsloMet), Norway)

Accepted Work in Progress

1570784404	Low Cost and Lightweight Boat for Water Lake Cleaning: A Work in Progress	Rodrigo Alberto Cordero (Turing Lab, Guatemala); Erick Petersen (Universidad Galileo, Guatemala); Oscar Rodas (Universidad Galileo & Tesla Lab, Guatemala)
1570786010	Junior High-School study of RoboPhysics	Ofer Danino (Technion, Israel); Gideon Kaplan and Itamar Feldman (Ministry of Education, Israel); Joseph Shapira (Consultant, Israel)
1570786665	Exploring Coding Attitudes of Chinese Elementary Students: A Preliminary Study	Shuhan Zhang and Gary K. W. Wong (The University of Hong Kong, Hong Kong); Xiaojing Sun (Weifang Dongming School, China)
1570786702	A3Sat: Using CubeSats to Inspire the Next Generation STEM Professionals	John Moore (Institute for Earth Observations, USA & NASA GLOBE Mission Earth, USA); Sriram Elango and Maxwell Friedman (Institute for Earth Observations, USA); Jin Kang (United States Naval Academy, USA)
1570787212	Why The Trans Programmer?	Skye Kychenthal (USA)
1570787345	A Unified Aviation STEM Program	Lyndsay Digneo (Federal Aviation Administration, USA); Holly M Cyrus (Research & Development & FAA, USA); Somil Shah (Federal Aviation Administration, USA)
1570787399	Retrieval of Data from the Database of a BCT-Voting System	Jacob Wolmer and Dylan Weiss (Tenafly High School, USA); Avimanyou K Vatsa (Fairleigh Dickinson University, Teaneck, USA)
1570787432	Developing MATLAB Data Acquisition and Control Functions for the LABVOLT Electromechanical Training System	Hussein Abdeltawab (Burke Center & Penn State Behrend, USA); Keven Rall (Penn State Behrend, USA); Sohail Anwar (Penn State Altoona, USA); Mesude Bayrakci Boz (Penn State Hazleton, USA)
1570787509	Engineering Project Activities Designed to Promote STEM Engagement	Zachary Dickinson, Tyler Seelnacht and Ramakrishnan Sundaram (Gannon University, USA)
1570787576	Study of the eruption mechanism of Saturn's moon Enceladus plume using the mathematical model of a geyser (periodic bubbling spring)	Hiroyuki Kagami (Tokuyama University, Japan)
1570787579	AI-Based Recipient Blood Type Matching Blood Transfusion Medical Device Design System	Atma Sahu (Coppin State University, USA)
1570787580	Design and Implementation of an Educational Suit	Seyed Ebrahim Esmaeili, Abrar Aleidan, Aishah Almajedi, Abdulazziz Alqattan, Fatmah Alramezi and Amal Alateyah (American University of Kuwait, Kuwait)
1570787652	Applying Engineering Techniques on Non-Traditional Real-World Problems	Pamela A. M. Bogdan (College Dr & Ocean County College, USA); John Verderosa V (Ocean County College, USA)

1570787656	A Collaborative Approach to Integrate Computational Thinking in an Integrated STEM Curriculum	Dazhi Yang (Boise State, USA); Shi Feng (Boise State University, USA)
1570787660	A Microcredentialing Strategy for Crowd Sourcing Support Resources within an Introductory Engineering Course	Henry Griffith (University of Texas at San Antonio, USA); Angela Griffith (Wright State University, USA)
1570787661	Accelerating Freshmen Engineering Students into Undergraduate Research Experiences	Ashley Larweck (The University of Texas at San Antonio, USA); Adam Hooker and Henry Griffith (University of Texas at San Antonio, USA)
1570787663	Towards the Effective Selection of Guest Speakers within an Introductory Electrical and Computer Engineering Course	Henry Griffith (University of Texas at San Antonio, USA); Jonathan Flores and Ashley Larweck (The University of Texas at San Antonio, USA)
1570787665	A Multi-Pronged Approach to Boosting STEM Engagement Through Low and No Cost Solutions	Michael W Kozak, Michael Kopack and Samantha Kupersmith (Lockheed Martin Advanced Technology Laboratories, USA)
1570787683	Credibility based Teaching Assessment in Smart Campus	Ruizhi Liao, Qianyu Ou, Wenjun Zheng and Zhan Shi (The Chinese University of Hong Kong, Shenzhen, China); Shuzhen Li (Nankai University & Binhai College, China)
1570788868	Virtual summer research camp for incoming Freshmen students in STEM	Sanish Rai (West Virginia University Institute of Engineering, USA)
1570788899	An Integrated Project-based Learning Approach in Engineering Technology Undergraduate Curricula	Mohammad U. Mahfuz (University of Wisconsin-Green Bay, USA)
1570789079	Creating an Appropriate Computer Science and Computational Thinking Graduate Curriculum for K-12 Teachers: Context and Initial Results	Katherine Herbert (1 Normal Ave & Montclair State University, USA); Sumi Hagiwara (Montclair State University, USA); Elizabeth M Rogacki (Mount Saint Dominic Academy, USA); Thomas J Marlowe (Seton Hall University, USA)
1570789162	Let the sunshine: learning about solar energy in equatorial Africa to facilitate the use of educational technology	Jorge Santiago-Aviles (University of Pennsylvania, USA); Geraldine Light (Walden University, USA)
1570789185	Parallel Programming with Pictures - A Second Path (WIP)	Liam J Davis-Wallace and Wu-chun Feng (Virginia Tech, USA)
1570789218	Physical Meaning of Digital Signal Processing: What Students May Think and What They Really Should Know	Konstantin A. Grebenyuk (Saratov State University, Russia)
1570789220	Engaging students in e-waste management through outreach programs	Sony Varghese (Sathyabama Institute of Science and Technology, India); Mahima Sharma (Indian Institute of Technology Madras, India)
1570790997	Electrode Alternatives for Surface EMG Detection in 3D Printed Upper-Limb Prostheses	Betti Madahy Rodas and Erick Petersen (Universidad Galileo, Guatemala); Oscar Rodas (Universidad Galileo & Tesla Lab, Guatemala)

1570791002	A Survey on the Future of Industrial Internet of Things and How it is Increasing the 2020s Manufacturing Productivity	Manolo Enrique Benegas (Universidad Galileo, Guatemala); Oscar Rodas (Universidad Galileo & Tesla Lab, Guatemala); Erick Petersen (Universidad Galileo, Guatemala)
1570791899	Maintenance 4.0 Applied To The Condition Analysis Of Rotating Electrical Engines: A Work in Progress	David Huertas and Erick Petersen (Universidad Galileo, Guatemala); Oscar Rodas (Universidad Galileo & Tesla Lab, Guatemala)

Accepted K-12 Posters

1570785296	Hamstring Injury Detection Using Body-Centric Nano Networks	Lawrence He (Princeton High School, USA)
1570786342	Controlling Wildfires through Aerial Seeding	Mrinalini Suresh Kumar (USA)
1570786445	Understanding the Geographic and Temporal Evolution of Asian Hate Crimes in the United States	Arthur Wang (Canada)
1570786550	Using Mycelium for the Packaging and Transportation of Fossils	Victor I Robila (Hunter College High School, USA)
1570786739	Using K-Wave to Simulate Ultrasound for Optimal Intravascular Ultrasound Device Frequencies	Zewen Ha (Canada)
1570787241	Fueling the Future: A Study of Nuclear Fusion Reactors and Their Modern Capabilities	Suzanne Keilson (Loyola University Maryland, USA); Dahlia Shafiq (River Hill High School, USA)
1570787434	Continuous-Release Mist Diffusion of Essential Oils For Varroa Control: A Field Study	Kaitlyn N Culbert (Toms River High School North, USA)
1570787496	Evaluating the Safety of COVID-19 mRNA Vaccines by Comparing Its Side Effects to Conventional Vaccines'	Shichun Zhang (Carlucci American International School of Lisbon, Portugal)
1570787551	A review of bionics for bird flight and potentially applicable mechanisms	Shu Zhitao (The Second High School Attached to Beijing Normal University, China); Lufan Wang (Florida International University, USA)
1570787554	The Impact of Blurb Sentiments on Crowdfunding Success	Siyuan Liu (Beijing 101 High School, China)
1570787558	Applying Face Recognition on Smart Family Album Player	Eckart M Schneider (Poolesville High School & John's Hopkins Applied Physics Laboratory, USA); Shunguang Wu (Johns Hopkins: Applied Physics Laboratory, USA)
1570787566	Effect of Cycle GAN in Melanoma Classification	Tyler R Jan (USA); Ava Miller (Tenafly High School, Tenafly, NJ, USA); Q'Andre Small (Bergen County Technical High School, Teterboro, NJ, USA); Ayushi Kumar (Monroe Township High School, Monroe Township, NJ, USA); Avimanyou K Vatsa (Fairleigh Dickinson University, Teaneck, USA)
1570787567	Using Computational Methods to Identify Small Molecules for Cancer Immunotherapy	Nicole Liang (USA)
1570787577	Development of chitosan encapsulated thyme essential oil as an alternative fruit fly repellent for household use	Vivian Wu (Palo Alto High School, USA)

1570787647	GAN Assistance in Diagnosis of Melanoma	Ava Miller (Tenafly High School, Tenafly, NJ, USA); Tyler R Jan (USA); Q'Andre Small (Bergen County Technical High School, Teterboro, NJ, USA); Ayushi Kumar (Monroe Township High School, Monroe Township, NJ, USA); Avimanyou K Vatsa (Fairleigh Dickinson University, Teaneck, USA)
1570787658	Tactic classification of broadcast soccer videos by using AI	Jioh In (Princeton International School of Mathematics and Science)
1570787662	A Quantum Optimization Algorithm for Single Machine Total Weighted Tardiness Minimization	Youhao S. Wang (Union County Magnet High School, USA); Julian Cheng (University of British Columbia, Canada)
1570787667	Statistical Analyses for Fantasy Sports	Zachary Wu (Johns Hopkins University Applied Physics Laboratory, USA); Vince Pulido (Johns Hopkins University Applied Physics Laboratory)
1570787671	Coding Classical Logic Gates on the D-Wave Quantum Annealer	Naren K Sathishkumar (American High School, USA)
1570787699	Bird Audio Recognition Using Convolutional Neural Networks	Kelsey H Lo (Johns Hopkins University Applied Physics Laboratory, USA)
1570787904	Analyzing the environmental effect of Chlorophyta using Convolutional Neural Network	Heyu Li (PRISMS, USA)
1570787929	Determining a Correlation Between Common Skin Conditions and Anxiety	Janice Chao (High Technology High School, USA); Ching-yu Huang (Kean University, USA)
1570787930	Reducing Plastic Consumption with Molecular Gastronomy	Shreya Dutt (MCVTS, USA)
1570787931	Rapid and Automated Detection of Cancer and Immune Cells Using Novel Machine Learning Recognition Algorithms	Nesara Shree (Portland State University, USA); Eva Vu-Stern (Catlin Gabel School, USA)
1570787932	Chess4Girls - Empowering Girls through Chess	Nesara Shree (Portland State University, USA)
1570788206	Visualizing Territorial Overlap of New Jersey Grapevines and Spotted Lanternflies using GIS	Sreya Jonnalagadda (Princeton International School of Matematics and Science, USA)
1570788543	Color Melting Ice	Bela Sameep Sanghavi (1312 Ashton Falls Drive & O'Fallon Township High School, USA)
1570788547	Creating an app using AI to analyze eye movements to screen for Neurological Disorders	Srihithaa Vaidya (USA)
1570788673	Using Unmanned Aerial Vehicles to Test Water Quality	Arnav Machavarapu (Westwood High School, USA); Aadet Samant and Zubin Chhabra (USA)
1570788829	How to Design Single-Sheet Origami Models	Qi Ao (Princeton Academy of the Sacred Heart, USA)

1570788847 Automatic Clothes Finder for the Colorblind Bao T To (USA)

1570788903 Stem project-Straw roller coaster Juliette Hancock, Jeanine Hancock, Julia Rodriguez, Alex Albiter and Carina Tullo (Goetz Middle School Jackson, NJ USA, USA)

1570788905 Detecting Anomalies in IoT Device Communication Based on MUD Profiles With Zeek and Python Rohan Nunugonda (Peddie School & Carnegie Mellon University CyLab, USA); Vyas Sekar (Carnegie Mellon University, USA)

1570788910 Project NARWHAL (Nautical Autonomous Robot for Wire Hunting through Analysis and Localization) Poster Abstract Thomas Edwards (Johns Hopkins University Applied Physics Laboratory, USA)

1570788911 Comparing the Gains of Bipolar Junction Transistor's (BJT) using the IV characteristics of a Transistor Roshan S Natarajan (Georgetown Day School, USA)

1570788914 Unsupervised GAN for Melanoma Q'Andre Small (Bergen County Technical High School, Teterboro, NJ, USA); Avimanyou K Vatsa (Fairleigh Dickinson University, Teaneck, USA); Tyler R Jan (USA); Ava Miller (Tenafly High School, Tenafly, NJ, USA); Ayushi Kumar (Monroe Township High School, Monroe Township, NJ, USA)

1570788920 Girls teaching Girls: Mentoring Middle School students in Mathematics Sowmya Natarajan (Whittle School and Studios, USA)

1570788942 Minimizing Weight in High Performing Gaming Mice Judah Lerman (Community Park Elementary School, Princeton NJ, USA)

1570788946 ATmega328P-Based Portable Heartrate Monitoring System That Can Transmit SMS Messages in Case of a Cardiac Arrest Eugene John (Korea (South)); Joseph Matthew Y. Espinas and Ramon Carmelo Y. Calimbahin (Philippines); Randy O. Zebroff (Canada)

1570789105 Facial Recognition for Deepfake Detection Firaol Desta (JHU/APL Intern, USA)

1570789165 Darwin's Finches Population - Will it Thrive or Dwindle under Climate Change? Kavin S Sankar (Enloe High School, USA)

1570789176 Investigation of the physics of creating fire with a plasma lighter Juliet Lopez (William F. Halloran School No. 22, USA); Jose L Lopez (Seton Hall University, USA)

1570789177 The Ethics of Artificial Intelligence: How to Avoid Bias in Machine Learning Systems Maya Lerman (Princeton High School, USA)

1570789178 The STEM of Origami Rishi Balaji (Gates Elementary School, USA)

1570789183 Fortune Teller Game Anish Chaganti (JP Stevens High School, USA)

1570789184 How Climate Change Effects the Ocean's Reefs Skylar E Glass (Visitation School, USA)

1570789186 Historical Re-creation of Marconi's Wireless Telegraph Stella C Firmenich and Richard Wegmann (Community Project Studios, Princeton University, USA)

1570789190 Faraday's Ice Pail Experiment Tvisha K Faria (20 Rowland drive, USA)

1570789192	Modeling Historical Devices Using Computer Aided Design (CAD)	Vanisha S Nagali (Allentown High School, USA); Rohan Deb (Hillsborough High School, USA)
1570789209	Bridging the Economic Divide through Blockchain	Jaden H Bethel (NONE, USA)
1570789212	Data Science and Analytics for Esports	Arjun Agrawal (Peddie School, USA)
1570789466	Art and Science Education United	Helena Rittenhouse (Princeton University EPICS, USA)
1570789490	Non-existence of the Algorithm that can Obtain the Optimal Solution for a Few Given Options of Investment in Constructive Mathematics	Jiahong Toby Sun (USA)
1570789855	Using Social Media to Predict Stock Market Prices	Samuel T. Ghezae (& Johns Hopkin's Applied Physics Laboratory, USA); Alexandru Cara (& John Hopkins Applied Physics Laboratory, USA); Nicholas P Farber (& Johns Hopkins Applied Physics Laboratory, USA)
1570789867	Using Machine Learning to Identify Gender Bias in Screenplays	Faith Comising, Hanna E Wosenu, Jason H Kang and Irene Shijo (Johns Hopkins University Applied Physics Laboratory, USA)
1570790227	Distraction Osteogenesis Rign System (DORS)	Trung Q Tchiong (Upper Darby School District, USA)
1570790675	Multiverse Network Management System: Developing an IP-Based Network Discovery Agent	Shane E Jayasundera (Montgomery Blair High School, USA)
1570790704	Developing a Noise Canceling Device for Ranged Sound Suppression	Jason J Lai and Joseph Townsend (Gwinnett School of Math, Science, and Technology, USA)
1570790897	Dynamic Fused Deposition Modeling for Rapid Development of Aerial Swarms	Ryan A Ellis (Johns Hopkins Applied Physics Laboratory, USA)
1570791013	The Fading Of Chinese Ethnic Minority Culture - A Case Study Of Five Inner Mongolia Novels	Hao Wen (High School, China)
1570785193	Determining a Correlation Between Common Skin Conditions and Anxiety	Janice Chao (High Technology High School, USA); Ching-yu Huang (Kean University, USA)

Workshop

1570784188	Coding with Tinkercad and the Use of Sustainable Printing Material	Aditya Dutt (Middlesex County Academy, NJ, USA)
1570788743	National Science Foundation Graduate Research Fellowship Program	Anni Leming (Professional Management Consulting Services, USA)
1570789215	To boldly go where no young mind has gone before...	Jose L Lopez (Seton Hall University, USA)
