

2026 IDUSA International Invention Contest

July 2026 | New York

Winner-Announcement

(Second batch)

Congratulations to the Winners of 2026 IDUSA International Invention Contest.

The 2026 IDUSA International Invention Contest & Artificial Intelligence Summer Camp, hosted by the PIRA and co-organized by the IDUSA, Youth Leadership Development Organization of the United States, numerous universities and innovation institutions across the United States, is a prestigious international contest. Integrating AI education, global exchange, technological innovation and youth leadership training, it strives to create an in-depth collaboration platform for young people worldwide amid the artificial intelligence era.

The list of winners is as follows:

Gold Award

- AI with Me(Shiu Hei Deniel Li)(Guangzhou Foreign Language School)China
- AI-Based Attention Monitoring and Statistics Device(Jue Hou,Kaiwei Wu,Bo Xu)(Beijing No.80 High School)China
- AI-Based Image Recognition System for Campus Garbage Classification(Archie Brown)(Ashford School)United Kingdom
- An Intelligent Badminton Shuttlecock Collecting and Feeding Device(Yuansheng Zhu)(University of Arts London)United Kingdom
- Assistive Input Device for Limb Disabilities(Xuanting Chen)(Shenzhen College of International Education)China
- Automatic Outdoor Clothes Retracting Device for Rainy Days(Lukas Schmidt)(ISR International School on the Rhine)Germany
- Autonomous Obstacle-Avoiding Patrol Robot(Khalid Al-Mansoori)(Bloom World Academy)United Arab Emirates
- Auxiliary Window Breaking Device for Bus Emergency Escape(Kavyan Nair)(Epsom College in Malaysia)Malaysia
- Coal-fired Power Plant Pneumatic Ash Conveying and Electrostatic Precipitation Collaborative Energy-saving Control System and Automatic Early Warning(Yanguang Cheng,Qi Zhu,Xiaohua Feng,Jinhui Wang,Feng Cai,Juwang Shi,Mulei Diao)(Huaneng Nanjing Jinling Power Generation Co., Ltd.)China
- Coast Guard(Kaixin You)(Shenzhen Middle School)China
- Construction Site Heat Stroke Warning Safety Helmet(Zhehan Wang,Zi Li,Tianye He)(Dongzhou Primary School (Group),Guangming District,Shenzhen City,Guangdong Province,China)China

- Crowd Density Warning Device for High-Traffic Areas(Feifei Ren)(Beijing No.80 High School)China
- Dangerous Person Recognition System(Haoyu Zhang)(Phillips Academy Andover)United States
- Dust Self-Filtering Integrated Machine(Ya Tu)(Zhixin High School, Guangzhou)China
- Easy-to-Use Intelligent Bedside Interactive Product for the Elderly(Luca Rossetti)(Aiglon College)Switzerland
- Hand & Arm Rehab Trainer(Qifeng Cheng)(Chinese International School)China
- Home Smart Medicine Cabinet(Jinyu Chen,Manyi He,Yibin Wang)(Shangbu Foreign Language School of Xi Jiao Liverpool University Basic Education Group,Futian District,Shenzhen,Guangdong Province,China)China
- Innovative Design of Eco-Friendly Takeaway Packaging with Degradable Materials(Seungwoo Lee)(Seoul Foreign School (SFS))South Korea
- Intelligent Bus Safety Operation Assistance System(Yihan Chen,Tianyuan Hao,Lihai Cong)(Qiaoxiang School,Experimental Education Group,Futian District,Shenzhen,China)China
- Intelligent Fuel Management System for Coal-Fired Power Plants(Yanguang Cheng,Tong Lin,Kaizhu Wang,Gang Yan,Juwang Shi,Kai Shi,Xu Han)(Huaneng Nanjing Jinling Power Generation Co., Ltd.)China
- Intelligent Snowboarding Boot Based on Electric Dual BOA System(Qian Cheng)(Tsinglan School)China
- Intelligent Whole-Room Humidification System(Juntao Zhang)(Yew Chung International School of Shanghai)China

- Jade Rabbit of the Moon Palace: Intelligent Interactive Lantern and AI Study Companion(Mengtian Li,Mingze Pei,Bin He)(Beijing No.80 High School,RCF Experimental School)China
- Mikania MicranthaIntelligent Recognition App(Zimo Yin)(Hong Kong Yew chung international school)China
- Model of Simple Ecological Purification and Interception Project for River Trash(Pawat Chai)(Shrewsbury International School Bangkok)Thailand
- Nondestructive Detection Technology and Intelligent Sorting Equipment for Internal Quality of Large-sized Fruits(Sai Xu,Huazhong Lu,Xin Liang)(Institute of Facility Agriculture, Guangdong Academy of Agricultural Sciences)China
- Real-Time AI Posture Monitoring Device for Eyesight Protection(Noah Thompson)(Mulgrave School)Canada
- Smart Cardboard Recycling System(Ziteng Wei)(Vanke Meisha Academy)China
- VEX Robot: Affogato(Leo Lei,Aiden C Chen,Austin Zhang,Anthony Yurynets)(North Shore High School,Syosset High School,Jericho High School)United States
- VEX Robot: Bummer(Jay Patel,Ranbir Hora,Darren Shen)(Jericho High School,Syosset High School,Roslyn High School)United States
- Water Quality Sampling and Detection Robot for Waters(Siti Aisyah)(Hwa Chong Institution , HCI)Singapore
- ZhiMou - A Hexahedron-Based Self-Service Vision Screening Device with Gesture Interaction Anti-Cheating(Yutong Li,Xuxia Gao,Tianxin Zeng)(Longhua District Experimental School Education Group,Shenzhen City,Guangdong Province,China)China

Silver Award

- AI Auxiliary Device for Children with Cognitive Impairment(Xinyang Tong)(Sendelta International Academy Shenzhen)China
- AI Intelligent Alarm System for Household Gas and Smoke (James King) (Bohls Middle School) United States
- AI Monitoring and Intelligent Reminder System for Campus Noise(Zainah Al-Suwaidi)(American Community School of Abu Dhabi)United Arab Emirates
- AI Neck-Worn Obstacle-Avoidance Interactive Device for People with Disabilities(Qingyang Zhao)(Beijing No.80 High School)China
- AI Voice Safety Reminder Assistant for Home-Living Seniors (Hannah Lange) (Lessing-Gymnasium Plauen) Germany
- AI-Based Plant Disease Early Warning and Identification System(Liam Carter)(JLS Middle School)United States
- AI-based Traffic Violation Recognition and Supervision System (Liam Thompson) (Hyde Middle School) United States
- An auxiliary exoskeleton device for patients with leg dysfunction(Yun Liu)(BEIJING 101 HIGH SCHOOL)China
- Anti-squeeze Silent Safety Buffer Improved Structure for Drawers (Camila Flores) (Hyde Middle School) United States
- Anti-Tip Flower Pot Device with Automatic Water Cutoff for Water Saving(Mookda Lert)(ISB International School Bangkok)Thailand
- Autonomous Floor-Cleaning Robot for Classroom (Cooper Rogers) (Cavendish Road State High School) Australia

- Auxiliary System for Students' Classroom Concentration Analysis(Felix Hartmann)
(Lessing-Gymnasium Plauen) Germany
- Barrier-Free AI Text-to-Speech Reader(Aisha Binti Abdullah)(SMTKL Sekolah Menengah Teknik Kuala Lumpur)Malaysia
- Brain Tumor MRI Intelligent Recognition Platform(Junyao Zhang)(Fukien secondary school)China
- Campus Hazard-Behavior Early-Warning System Based on Image Recognition (Ava Thompson) (Phillips Exeter Academy) United States
- Campus Night Security Patrol Obstacle Avoidance Robot (Matilda Campbell)
(Balwyn High School) Australia
- Creative Design of Interactive Intelligent Campus Guide Sign(Ryan Tan)(Dunman High School)Singapore
- Design of Campus Rainwater Collection and Green Irrigation System(Olivia Moore)(Lisgar Middle School)Canada
- Design of Lightweight Prefabricated Mini Emergency Shelter(Amelia Wright)(Sevenoaks School)United Kingdom
- Desktop Automatic Sorting and Storage Mini Robot (Sophia Carter) (Cupertino Middle School) United States
- Digital Therapeutic System for Children's Attention and Behavioral Intervention Based on Reinforcement Learning(Vlan WaiLun Dong)(BASIS International School Park Lane Harbour)China
- Foldable Splash-proof Multifunctional Water-saving Hand-washing Device
(Mila Fischer) (Rhein-Wied-Gymnasium Neuwied) Germany

- Household Medicine Storage System Supported by AI+APP(Boyao Zhang,Qinghan Zhang)(Beijing No.80 High School)China
- Intelligent Garbage-Sorting Robot (Sophia Martinez) (Thomas Jefferson High School for Science and Technology) United States
- Intelligent Navigation and Question-answering Service Robot (Oliver Hall) (Edgar Allan Poe Middle School) United States
- Intelligent Voice Assistant for Classroom Note Organization(Harry Walker)(Westbourne School)United Kingdom
- Machine Learning-Based Simple Platform for Crop Disease Identification(Seoyeon Choi)(Dulwich College Seoul)South Korea
- Mobile Intelligent Irrigation Robot for Greenhouses(Lena Müller)(Kantonsschule Baden)Switzerland
- Modular Reconfigurable Multi-Functional Portable Stationery System for Students(Tanakorn Somsri)(Harrow International School Bangkok)Thailand
- Overload Cutoff Protection Socket for Electric Vehicle Charging(Emma Fischer)(Willms-Gymnasium)Germany
- ROS based pipeline inspectionand dredging crawler robot(Chenfei Yan)(International school Bangkok)Thailand
- Safe Retractable Cable-organizing Device for Classroom Desks (Noah Weber) (Albert-Einstein-Gymnasium München) Germany
- Small Autonomous Line-Tracking Material Delivery Robot(Manon Bernard)(EIB Monceau)France
- VEX Robot: Olive Oil(Andrew Yan,Aidan Low,Alexander Drukaroff,Arjun Mashettiwar)(John F. Kennedy High School,Jericho High School,Great Neck South)United States

Bronze Award

- Adjustable Layered Storage Module for Multi-Functional Student Desks(Amirul Bin Rahman)(Chung Ling Private High School)Malaysia
- AI assisted tools for creative writing(Menghan Shi)(Guanggu First Primary School, Wuhan City, Hubei Province) China
- AI Early Warning Terminal for Smart Home Environment Regulation(Phạm Thị Linh)(British Vietnamese International School)Vietnam
- AI facial recognition security system(Yao Feng)(Zhangjiakou No.1 Middle School, Hebei Province) China
- AI Garbage Classification Recognition System for Community Environment(Elijah Rodriguez)(Timberline Middle School)United States
- AI Intelligent Animal Species Recognition Popular Science System (Noah Lewis) (Rachel Carson Middle School) United States
- AI Mini-Program for Plant Leaf Pest & Disease Identification(Benjamin Rodriguez) (Bellarmine College Preparatory) United States
- AI Recognition & Guidance System for Community Garbage Classification (Hazel Barnes) (Girrawheen Senior High School) Australia
- Automatic Irrigation & Patrol Robot for Greenhouse (Elijah Scott) (The Harker School) United States
- Constant Temperature Ventilation Auxiliary Device for Classroom Windows (Ava Robinson) (Hyde Middle School) United States
- Energy-Saving Interactive Urban Landscape Installation Design(Lila Harrison)(David Game College)United Kingdom

- Energy-Saving Renovation Scheme for Corridor Lighting in Old Residential Communities(Nattawut Kong)(NIST International School)Thailand
- Floating Water-Trash Cleaning Robot (Finn Sullivan) (Bentleigh Secondary College) Australia
- Foldable Multi-Functional Emergency Lighting Toolkit for Outdoors(Omar Al-Zahri)(GEMS School of Research and Innovation)United Arab Emirates
- Foldable Portable Waterproof and Dustproof Book Storage Clip (Amelia Scott) (Bohls Middle School) United States
- Improved Anti-slip Stair Handrail with Luminous Prompt Function (Charlotte Young) (Edgar Allan Poe Middle School) United States
- Improved Integrated Rain-proof Protection Design for Schoolbags (Sophia Neumann) (Goethe-Gymnasium Bad Ems) Germany
- Improved Window Structure with Noise Reduction and Ventilation Integration(Isabella King)(The National Mathematics and Science College)United Kingdom
- Integrated Bracket Design for Small-Scale Wind and Solar Power Generation(Mia Becker)(Schule Schloss Salem)Germany
- Intelligent AI Posture Reminder Device for Teenagers(Olivia Martinez)(Cooper Middle School)United States
- Intelligent Automatic Flower Watering and Maintenance Robot(Isla Mitchell)(Box Hill High School) Australia
- Lightweight Portable Multi-Functional Camping Equipment Design(Lim Mei Ling)(Orbix International School Klang)Malaysia

- Micro Robot for Simple Pipeline Defect Detection(Noah Schmid)(Brillantmont International School)Switzerland
- Mini Robot for Automatic Indoor Floor Cleaning(Chanya Wong)(Prem International School)Thailand
- Mini Robot for Delivering Emergency Supplies in Corridors(Ben Weber)(BIS Bavarian International School)Germany
- Model Design of Multi-Level Mini Urban Parking Lot(Liam Wilson)(Fort Erie International Academy)Canada
- Portable Acoustic-Optical Reminder Device to Prevent Key Forgetting(Minjun Park)(Korea International School)South Korea
- Public Art Installation Design Driven by Solar-Powered Decorative Lights(Haerin Jung)(KCIS Korea Christian International School)South Korea
- Simple Sorting Training Robot with Multi-Manipulators(Oliver Smith)(ACS International School Cobham)United Kingdom
- Smart Home Energy Butler(Zizheng Tian)(Tianjin Second Yaohua Middle School) China
- Structural Design of Child-Safe Anti-Miscontact Household Socket(Sophie Blanc)(Sekundarschule Rapperswil-Jona)Switzerland
- Swimming Pool Falling Detection and Rescue Auxiliary Robot (Ethan Miller) (Cupertino Middle School) United States
- Telescopic Anti-slip Footrest Auxiliary Device for Student Desks (Mia Walker) (Rachel Carson Middle School) United States
- Urban traffic congestion prediction system(Zidi Zhang)(Tianjin No.2 High School) China