

Competition Report

Universal Robotics Challenge 2023 Executive Committee

January 2024

Overview

Title:	Universal Robotics Challenge 2023
Summary:	An international competition using ArtecRobo robotics kits
Purpose:	Solve various challenges and deepen children's interest in the field of robotics
Dates:	Online preliminaries with in-person finals
Idea Contest:	October 30, 2023
Real Robotics Preliminaries:	July 7-25, 2023
World Finals:	August 26, 2023
Virtual Robotics:	September 9 (Sat), 2022

Held by the Universal Robotics Challenge 2023 Executive Committee

Sponsors:	Xob Co., Ltd., Ishida Co. Ltd., ELECOM Co., Ltd., Otsuka Corporation, Kamigumi Co.,
	Ltd., Kyohritsu Electronic Industry Co., Zetta Linx Inc., Sony Global Education, Turner
	Colour Works Ltd., Daiichijushi Industry Co., Ltd., Tosho Printing Co., Ltd., Japan Al
	Consultant, Pentel Co., Ltd.
Media Sponsors:	Seibundo Shinkosha, GMO Media Inc., BSC International
Special Thanks To:	Gakken Method Co., Ltd.
Planning:	Artec Co., Ltd. Universal Robotics Challenge Executive 2023 Committee

Competition Overview

Universal Robotics Challenge 2023 is a competition for elementary and middle schoolers, held both in-person and online. This year's competition was split into three divisions with a total of over 1,400 entries.

• In Real Robotics, children follow the rules of the competition as they compete for the high score.

• In Online Robotics, children use their ArtecRobo kit to build a robot for the competition theme and submit a video of it solving the challenge.

• In Virtual Robotics, children use an online robotics simulator to test their programming skills.

Real Robotics

Stacking Blocks

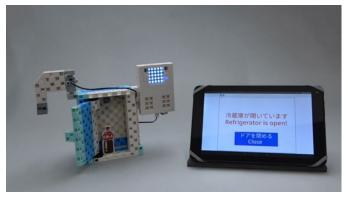
This competition marked the first in-person event in four years, starting with participants taking on the challenge of creating their own original robots before submitting them online.



Idea Contest

Fight for the Climate

In this division, competitors made their own original project before uploading a video of it to YouTube.



Virtual Robotics

Fight for the Climate

In this division, competitors used an online robotics simulator to test their programming skills.



Real Robotics

World Championship Results

Regular Division

1st

Mie, Japan (Grade 6) Eishin-R Rito Jinya Kenshin Syun Eishinkan Learning Center

2nd

Shizuoka, Japan (Grade 5) Gyoshu RSI Starfish Shoma Iwasaki Itsuki Morioka Rin Morioka Sora Fuzawa Rikuto Kanemoto Katoh Gakuen Gyoshu Elementary ICT Club

3rd

Hong Kong (Grade 6) Ka Hel Ip Tsz Kit Ngan

Yat Sum Tam

Lok Lam Wong

Wing Ho Ng

S.K.H.Chu Oi Primary School (Lei Muk Shue)

1st

Mie, Japan (Grade 8, 9) Eishin-A Takehisa Naoyuki Syotaro Eishinkan Learning Center

2nd

Mie, Japan (Grade 7, 8, 9) Smile Terra Team Tomoki Ohata Takumi Matsumura Hinata Inomata Smile Computer School

3rd

Taiwan (Grade 7) R-Express Hong-Jin Chen Taipei Private Dongshan Junior High School

Japan Qualifiers

Regular Division

1st

Mie, Japan (Grade 6)

Team Eishin-R

Rito

Jinya

Kenshin

Syun

Eishinkan Learning Center

Prizes

Tosho Card (provided by Otsuka Corporation)

Wooden Doorknob Plate Craft Kit (provided by Turner Colour Works Ltd.)

Tosho Card (provided by Kamigumi Co., Ltd.)

SMASH Mechanical Pencils (3 colors) (provided by Pentel Co., Ltd.)

BON Order Book (provided by Tosho Printing Co., Ltd.)

Large notebook (provided by Kyowa Shiko Co., Ltd.)

2nd

Shizuoka, Japan (Grade 5) Team: Gyoshu RSI Starfish

Shoma Iwasaki

Itsuki Morioka

Rin Morioka

Sora Fuzawa

Rikuto Kanemoto

Katoh Gakuen Gyoshu Elementary ICT Club

Prizes

Wonderkit PIN Code Relay 2 (provided by Kyohritsu Electronic Industry Co., Ltd.)

Wooden Doorknob Plate Craft Kit (provided by Turner Colour Works Ltd.)

Five-Minute Logic Drills (provided by Sony Global Education)

SMASH Mechanical Pencils (3 colors) (provided by Pentel Co., Ltd.)

BON Order Book (provided by Tosho Printing Co., Ltd.)

Tosho Card (provided by Zetta Linx Inc.)

Large notebook (provided by Kyowa Shiko Co., Ltd.)

3rd

Osaka, Japan (Grade 6) TAKUMA & KUUYA Takuma Ueno Kuya Morii FLASH Computer School Prizes Encyclopedia Projector (provided by Gakken Method Co., Ltd.)

Wooden Doorknob Plate Craft Kit (provided by Turner Colour Works Ltd.) SMASH Mechanical Pencils (3 colors) (provided by Pentel Co., Ltd.) Large notebook (provided by Kyowa Shiko Co., Ltd.)

Judge's Choice

Shiga, Japan (Grade 5, 6) Kazuki and Yuto Kazuki Yuuto Ikeda Kouondo City of Wind Learning Center Prizes Key Paletto Wired Keyboard (provided by ELECOM Co., Ltd.) SMASH Mechanical Pencils (3 colors) (provided by Pentel Co., Ltd.) Large notebook (provided by Kyowa Shiko Co., Ltd.) Advanced Division

1st

Mie, Japan (Grade 6) Eishin- A Takehisa Naoyuki Syotaro Eishinkan Learning Center Prizes Tosho Card (provided by Daiichijushi Industry Co., Ltd.) SMASH Mechanical Pencils (3 colors) (provided by Pentel Co., Ltd.) Large notebook (provided by Kyowa Shiko Co., Ltd.)

2nd

Mie, Japan (Grade 7, 8, 9) Smile Terra Team Tomoki Ohata Takumi Matsumura Hinata Inomata Smile Computer School Prizes

G-SHOCK (provided by Xob Co., Ltd.)

Wooden Doorknob Plate Craft Kit (provided by Turner Colour Works Ltd.)

Large notebook (provided by Kyowa Shiko Co., Ltd.)

3rd

Kanagawa, Japan (Grade 6, 7) PUSH and PUT Sosuke Tamaoka Shun Aoki Fujisawa Computer Learning Center Prizes Five-Minute Logic Drills (provided by Sony Global Education) Wooden Doorknob Plate Craft Kit (provided by Turner Colour Works Ltd.) SMASH Mechanical Pencils (3 colors) (provided by Pentel Co., Ltd.) Large notebook (provided by Kyowa Shiko Co., Ltd.)

Judge's Choice

Kanagawa, Japan (Grade 8) Daily Report Sakuya Mizunashi Ko Sawada Kawasaki Municipal Taira Junior High School Science Club Prizes Key Paletto Wired Keyboard (provided by ELECOM Co., Ltd.) SMASH Mechanical Pencils (3 colors) (provided by Pentel Co., Ltd.) Large notebook (provided by Kyowa Shiko Co., Ltd.)

Idea Contest

World Championship Results

Junior Division

1st

Malaysia (Grade 2, 6, 5) Smart Forest Fire Detection System (SFFDS) FAIQAH HANNAN BINTI MUHAMOD FAHMIR FARHAH HUMAIRA BINTI MUHAMOD FAHMIR SITI NUR ALISHA BINTI AHMAD ISA SK DATUK NAN KAYA

2nd

Hong Kong (Grade 2, 3, 4) Let Go Green Lee Man Yi Wong Sze Man Kwok Hiu Yeung Hayden Leung Tsz Him Wong Ching Yim AD & FD OF POHL LEUNG SING TAK SCHOOL

3rd

Philippines Plant Planting Robot Michael Ryan Chong Ember Prinze Wong MGC New Life Christian Academy

Finalist

Hong Kong (Grade 3) Smart Classroom Chen Lianyu Lucas Cheung Yan Yuk Lam Chun Wai Milton Mok Hing Yu Tam Pak Yui Hong Kong Baptist University Affiliated School Wong Kam Fai Secondary and Primary School

Honorable Mention

Malaysia (Grade 5, 6) MOVBOT AHMAD HARIZ BIN AHMAD HAFIZ ADDRIEL WAFEEQ BIN MUHAMAD ADLI SHAM FARHAN RAYYAN ZIQRI BIN SYAMSULZAIDI SEKOLAH KEBANGSAAN TAMAN SERI GOMBAK 2 Senior Division

1st

Taiwan (Grade 8) Flame Guardian Felipe Vicente Pin-Chien Tseng Kai-Feng Chen Hong-Jin Chen Taipei European School Taipei Municipal Binjiang Experimental Junior High School Taipei Municipal Dazhi High School Taipei Private Dongshan Junior High School

2nd

Hong Kong (Grade 3) Climate Action Innovation Competition Hong Kong Workers' Brigade Aberdeen Technical School

3rd

Malaysia FG-008 MUHAMMAD AMMAR HAFIZ BIN AMIZAR MUHAMMAD FIRDAUS BIN MOHD SAIDI ADAM NAQIB BIN MD SETARIA MED 3 SEKOLAH BINA INSAN YMSU

Finalist

Hong Kong (Grade 9) Automatic Parallel Parker Yeung Kwan Ming Chan Pak Lam Wong Kin Ming 3 HKSKH Bishop Hall Secondary School

Honorable Mention

Philippines

Robo Paper Recycler

Anya Clarissa Legaspi

Riley Therese Abano

Sarah Sophia Cabodil

Alain Zachary Cabodil

De La Santiago Zobel - St. Mary's College QC

Japan Qualifiers

Junior Division

1st

Solar Panel Cleaner (for Elementary Schools) Shiho Nakabayashi (Grade 4) Pasocorp Karasuma Oike Learning Center Prizes Tosho Card (provided by Daiichijushi Industry Co., Ltd.) Quo Card (provided by Japan Al Consulting) SMASH Mechanical Pencils (3 colors) (provided by Pentel Co., Ltd.) Large notebook (provided by Kyowa Shiko Co., Ltd.)

2nd

Switch Off EV Kaede Moriki (Osaka, Grade 5) Prizes Tosho Card (provided by Ishida Co., Ltd.) Wooden Doorknob Plate Craft Kit (provided by Turner Colour Works Ltd.) Tosho Card (provided by Otsuka Corporation) SMASH Mechanical Pencils (3 colors) (provided by Pentel Co., Ltd.) Large notebook (provided by Kyowa Shiko Co., Ltd.)

3rd

Shadow-Shifting Tent Sota (Grade 4) Endo IT Training School Prizes

Tosho Card (provided by Kamigumi Co., Ltd.) Wooden Doorknob Plate Craft Kit (provided by Turner Colour Works Ltd.) SMASH Mechanical Pencils (3 colors) (provided by Pentel Co., Ltd.) Large notebook (provided by Kyowa Shiko Co., Ltd.)

Finalist

It's for the electricity bill, mom! Masaki Owada (Grade 3) Kiyoharahigashi Elementary School, Tochigi Prizes

Key Paletto Wired Keyboard (provided by ELECOM Co., Ltd.) Wooden Doorknob Plate Craft Kit (provided by Turner Colour Works Ltd.) SMASH Mechanical Pencils (3 colors) (provided by Pentel Co., Ltd.) Large notebook (provided by Kyowa Shiko Co., Ltd.)

Honorable Mention

Mangrove Planter Kai Miyazaki (Grade 6) COCON Maebashi Programming School

Prizes

Wonderkit PIN Code Relay 2 (provided by Kyohritsu Electronic Industry Co., Ltd.) Wooden Doorknob Plate Craft Kit (provided by Turner Colour Works Ltd.) SMASH Mechanical Pencils (3 colors) (provided by Pentel Co., Ltd.) Large notebook (provided by Kyowa Shiko Co., Ltd.)

Senior Division

1st

Aluminum and Steel Sorter Taichi (Grade 2) Osaka Minami-Senri Turtoring Center Prizes

Quo Card (provided by Japan Al Consulting) Wooden Doorknob Plate Craft Kit (provided by Turner Colour Works Ltd.) Tosho Card (provided by Otsuka Corporation) Large notebook (provided by Kyowa Shiko Co., Ltd.)

2nd

Moving Walkways on the Highway Yuki Miyajika (Grade 7) Smile Computer School / Takatori Junior High School Prizes G-SHOCK (provided by Xob Co., Ltd.) Wooden Doorknob Plate Craft Kit (provided by Turner Colour Works Ltd.) Tosho Card (provided by Otsuka Corporation) SMASH Mechanical Pencils (3 colors) (provided by Pentel Co., Ltd.) Large notebook (provided by Kyowa Shiko Co., Ltd.)

3rd

Don't need it? Then toss it! Bot Nanbu Kaneshiro (Grade 7) Innovator Academy Takatsuki (Osaka Prefecture) Prizes Key Paletto Wired Keyboard (provided by ELECOM Co., Ltd.) Wooden Doorknob Plate Craft Kit (provided by Turner Colour Works Ltd.) SMASH Mechanical Pencils (3 colors) (provided by Pentel Co., Ltd.) Tosho Card (provided by Zetta Linx Inc.) Large notebook (provided by Kyowa Shiko Co., Ltd.)

Finalist

Little Mr. AC Saver (Grade 7, 8, 9) Mika Sakurai Nao Hamada Shinji Uenoyama Yusei Takata Akegawa Minami Junior High School Computer Club Prizes Key Paletto Wired Keyboard (provided by ELECOM Co., Ltd.) Wooden Doorknob Plate Craft Kit (provided by Turner Colour Works Ltd.) SMASH Mechanical Pencils (3 colors) (provided by Pentel Co., Ltd.) Large notebook (provided by Kyowa Shiko Co., Ltd.)

Honorable Mention

Fight the Monsters and Save Our Trees! Hayato Hirao (Grade 8) Innovator Academy Takatsuki Prizes Wooden Doorknob Plate Craft Kit (provided by Turner Colour Works Ltd.)

Encyclopedia Projector (provided by Gakken Method Co., Ltd.) SMASH Mechanical Pencils (3 colors) (provided by Pentel Co., Ltd.) Large notebook (provided by Kyowa Shiko Co., Ltd.)

Virtual Robotics

World Championship Results

Junior Division

1st

Malaysia (Grade 3) FAQIF ARSYAD BIN MUHAMMAD FIKRI SK TENGKU INDERA PETRA

2nd

Malaysia (Grade 3) AHMAD HASIF BIN SUPARDI SK SRI KIAMBANG

3rd

Japan (Grade 4)

Lover of Chestnuts

Human Academy Junior Robotics Classroom: Diolagare Learning Center

Senior Division

1st

Malaysia (Grade 9) ORHAN GHAZI BIN HAFIZULFAHMI SM ISLAM AL-AMIN GOMBAK

2nd

Malaysia CHARLES LOH HOWE WON (Grade 9) SMK METHODIST SIBU

3rd

Japan

Koki Ishizawa (Grade 7) Nagoya City Sakuragaoka Junior High

Japan Qualifiers

Junior Division

1st

Lover of Chestnuts (Grade 4) Human Academy Junior Robotics Classroom: Diolagare Learning Center Prizes Quo Card (provided by Kunimatsu Co., Ltd.) Quo Card (provided by Japan Al Consulting) Wooden Doorknob Plate Craft Kit (provided by Turner Colour Works Ltd.) Large notebook (provided by Kyowa Shiko Co., Ltd.)

2nd

Keita (Grade 5) Gakken Freewood Akiba Center / Beppu City Yamanote Elementary School Prizes Wonderkit PIN Code Relay 2 (provided by Kyohritsu Electronic Industry Co., Ltd.) Wooden Doorknob Plate Craft Kit (provided by Turner Colour Works Ltd.) BON Order Book (provided by Tosho Printing Co., Ltd.) Tosho Card (provided by Zetta Linx Inc.) Large notebook (provided by Kyowa Shiko Co., Ltd.)

3rd

Kotaro Naka (Grade 5)

Smile Computer School / Yokosuka City Mabori Elementary School (Kanagawa Prefecture)

Prizes

Wooden Doorknob Plate Craft Kit (provided by Turner Colour Works Ltd.)

Encyclopedia Projector (provided by Gakken Method Co., Ltd.)

SMASH Mechanical Pencils (3 colors) (provided by Pentel Co., Ltd.)

Large notebook (provided by Kyowa Shiko Co., Ltd.)

Senior Division

1st

Koki Ishizawa (Grade 7) Nagoya City Sakuragaoka Junior High

Prizes

Quo Card (provided by Kunimatsu Co., Ltd.)

Wooden Doorknob Plate Craft Kit (provided by Turner Colour Works Ltd.)

Large notebook (provided by Kyowa Shiko Co., Ltd.)

2nd

Yasukou (Grade 8) Smile Kids Programming School

Prizes

G-SHOCK (provided by Xob Co., Ltd.)

Wooden Doorknob Plate Craft Kit (provided by Turner Colour Works Ltd.)

Large notebook (provided by Kyowa Shiko Co., Ltd.)

3rd

Akiko Baba (Grade 9) Miyagi University of Education Junior High School (Miyagi Prefecture) Prizes

Five-Minute Logic Drills (provided by Sony Global Education) Wooden Doorknob Plate Craft Kit (provided by Turner Colour Works Ltd.) SMASH Mechanical Pencils (3 colors) (provided by Pentel Co., Ltd.) Large notebook (provided by Kyowa Shiko Co., Ltd.)

From the Executive Committee

2023's Universal Robotics Challenge was held simultaneously online and in-person, and it wouldn't have been such a stunning success without the cooperation and hard work of numerous people.

We'd like to offer our heartfelt thanks for the help of all those involved as well as for the support given to us by our sponsors.

This competition marks seven years of the Universal Robotics Challenge working to include a diverse number of participants not only from here in Japan but across the globe. We will continue our proud tradition of teamwork to help spread the word of the Universal Robotics Challenge and make 2024's competition all the better.

We sincerely appreciate your continued support and guidance.