

## Science Centre Singapore Celebrates 25 Years of Inspiring STEM Talent at the National Robotics Competition 2023

Over 60,000 students have participated in the annual challenge since 1999, designed to support skills and ignite interest in Science, Technology, Engineering and Mathematics

**Singapore**, **9 September 2023** - National Robotics Competition (NRC), the nation's largest robotics challenge that encourages students to develop skills in creativity, engineering and problem-solving, today commemorated its silver anniversary at the on-site finals and awards ceremony. The competition is jointly organised by Science Centre Singapore and Duck Learning, sponsored by the Ministry of Education, and supported by Global Robotics Games, Singapore Polytechnic, RoboCup Singapore, and WOW Education.

Inaugurated in 1999, NRC was launched to amplify Singapore's commitment to nurturing the potential of Singapore's youth in the realm of robotics, and pioneer beyond-the-classroom Science, Technology, Engineering and Mathematics (STEM) learning. In its 25-year history, the competition has attracted more than 60,000 participants, with this year's iteration rallying some 2,500 student enthusiasts competing under the theme of "Sustainable Solutions".

Participants competed in teams across six tournament categories between 21 August to 9 September and were challenged to build and program robots to complete a host of sustainability-themed missions. For example, participants in the Upper Primary and Secondary category had to collect a prop solar panel with their robots and install them above the city centre, positioned towards the sun, while participants in the Tertiary category had to deliver prop wind turbines with their robots to designated locations, and store energy tokens in the battery storage.

New to this year's competition are two new categories - NRC AI Maker Series, where participants designed Artificial Intelligence (AI) or Machine Learning models, and NRC RoboCup Singapore CoSpace Coding Challenge, focused on the theme of Smart Transportation which required participants to program virtual robots to complete common tasks in smart transportation. Also returning to NRC for the second time was the Pre-School Robotic Category, which saw students as young as five-years-old gaining exposure to logic-based thinking via collaborative missions.

In all, 125 prizes were awarded across various areas of merit, including best presentation, best research, and best robot performance. Winning teams received cash prizes of up to \$\$2,000.

Associate Professor Lim Tit Meng, Chief Executive, Science Centre Board, said, "Over the course of a remarkable 25-year journey, the National Robotics Championship has stood as a testament to the Centre's dedication in nurturing creativity, honing critical thinking, and facilitating immersive hands-on learning experiences. As we celebrate this milestone, we take pride in the enduring legacy we've cultivated. We hope to continue shaping the young minds into visionary problem solvers and future innovators, with STEM at the centre."



In a bid to foster an all-rounded national ecosystem that drives interests, innovation, industrial integration and awareness of Robotics, AI and Coding for the future, Science Centre Singapore also initiated a new National Robotics (Schools) Advisory Committee, to consolidate and present a cohesive, synergetic and encompassing approach for all Robotic Competitions at the national level.

This initiative brings together various agencies, industrial representatives as well as professional groups as a central connective body, to work together and recommend strategic alignment of the various robotics competitions in Singapore, like NRC, RoboCup Singapore, and FIRST LEGO League to stimulate, encourage and nurture a passion for robotics among youths.

## At present, the Committee comprises:

- Dr. Darren Tan Zhiming, Senior Curriculum Specialist/Physics, Science Unit, Curriculum Planning and Development Division, Ministry of Education
- Mr. Hozefa Aziz Singapore Wala, Chief Executive Officer, Duck Learning
- Dr. Mohan Rajesh Elara, Provost Chair Professor, , Singapore University of Technology and Design
- Prof. Quek Tong Boon, Chief Executive, National Robotics Programme
- Mr. Tan Teck Chuan, Director of Platform Systems, Home Team Science and Technology Agency
- Dr. Wu Yan, Deputy Head, Robotics & Auto Systems, Institute for Infocomm Research, A\*STAR
- Prof. Yeong Wai Yee, Acting Chair, School of Mechanical & Aerospace Engineering, Nanyang Technological University
- Dr. Zhou Changjiu, Centre Director, Advanced Robotics & Intelligent Control Centre, Singapore Polytechnic

For more information on NRC 2023, please visit:

https://www.science.edu.sg/for-schools/competitions/national-robotics-competition.



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## **About Science Centre Singapore**

Science Centre Singapore, a non-formal educational institution and leading regional Science Centre, along with its group of attractions, brings out the wonders of science, technology, engineering and mathematics through its unique blend of exhibitions, educational programmes and events. A custodian of creativity and innovation, Science Centre Singapore has captured the evolution of scientific developments for more than four decades.

The Centre and its partners have played a pivotal role in transforming the way students and the public interact with and learn about science, technology, engineering and mathematics. Since 1977, the Centre has welcomed over 30 million visitors and inspired them with more than 1,000 exhibits spread across 14 exhibition galleries and outdoor exhibition spaces.

The Centre's group of attractions include Omni-Theatre, Snow City and KidsSTOP™. The Omni-Theatre, Southeast Asia's first 8K 3D digital theatre with a 23m wide seamless dome screen, is an immersive destination like no other. Snow City is Singapore's only permanent indoor snow centre offering an Arctic inspired experience at Singapore's first ice gallery and snow chamber. KidsSTOP™ - Where every child gets to Imagine, Experience, Discover and Dream - is Singapore's first children's science centre offering an enriching experience through purposeful play for children aged 18 months to 8 years old. For more information, please visit <a href="https://www.science.edu.sg">www.science.edu.sg</a>.