General

Petrosains RBTX Challenge 2023 empowers robotics enthusiasts in Pahang

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PEKAN, 18 June 2023 – The excitement of robotics filled the air as Petrosains, in collaboration with the Sports and Arts Education Division, Ministry of Education, Malaysia, organised the highly anticipated Petrosains RBTX Challenge 2023.

On 17 and 18 June, students and teachers from various schools across Pahang gathered at the UMP STEM Lab to participate in an engaging two-day workshop focusing on two exhilarating competition tracks: line tracing and sumo.

The workshop, a prelude to the main Petrosains RBTX Challenge, aimed to equip participants with the necessary skills and knowledge to compete in the upcoming event.

It provided an excellent opportunity for students and teachers to delve into the world of robotics, learn from experts, and refine their creations.

According to the Assistant Vice-Chancellor, Industry and Community Collaboration Division, Associate Professor Ir. Dr. Nurul Hazlina Noordin, under the guidance of experienced mentors, attendees were introduced to the fundamentals of robotics, including programming, mechanical design, and electrical components.

Workshops and interactive sessions allowed participants to gain hands-on experience building and programming their robots.



“The line tracing competition track captured the attention of participants as they focused on developing robots capable of accurately following a predetermined path on a track.

“Through insightful presentations and practical exercises, students and teachers learned about line

detection sensors, motor control, and algorithm optimisation techniques.

“They eagerly applied this knowledge to their robotic creations, fine-tuning them for optimal performance,” she said.

Simultaneously, the sumo competition tracks sparked fierce excitement among participants.

With the objective of designing robots capable of pushing their opponents out of a circular ring, students and teachers eagerly immersed themselves in the intricacies of robot design, weight distribution, and strategic manoeuvring.

The workshop provided valuable guidance on sensor integration, effective driving mechanisms, and programming strategies to outwit opponents.

The Petrosains RBTX Challenge 2023 workshop facilitated technical learning and encouraged collaboration and knowledge sharing.

Participants had the opportunity to network with fellow robotics enthusiasts, exchange ideas, and form connections within the thriving robotics community in Pahang.

In addition to the competition-focused activities, attendees were treated to informative talks by industry professionals who shared their experiences and insights into the real-world applications of robotics.

They discussed the impact of robotics in various fields, such as manufacturing, healthcare, and agriculture, inspiring participants to explore the endless possibilities and potential career paths in the robotics industry.

The workshop concluded with a sense of accomplishment and anticipation for the main Petrosains RBTX Challenge 2023.

The students and teachers left the event equipped with newfound knowledge, practical skills, and the motivation to further enhance their robotic creations.

Petrosains and the Ministry of Education were applauded for their joint efforts in organising the workshop, as it provided a valuable platform for educational enrichment and STEM development in Pahang.

They have empowered the next generation of robotics enthusiasts and engineers by fostering a love for robotics and encouraging innovation.

With the success of the Petrosains RBTX Challenge 2023 workshop, the stage is set for an exciting competition where participants can showcase their skills, creativity, and problem-solving abilities.

The main event promises to be a thrilling display of robotics prowess and an opportunity for participants to contribute to the ever-growing field of robotics in Malaysia.

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