Media Contact:
Prof. Cardinal Warde
Caribbean Science Foundation
Bridgetown, Barbados
warde.csf@gmail.com

**Caribbean Science Foundation**
CARICOM Research Building
UWI Cave Hill Campus
Bridgetown, Barbados

# 75 Students in 4 Levels Complete the 2024 Barbados Junior Robotics Camps

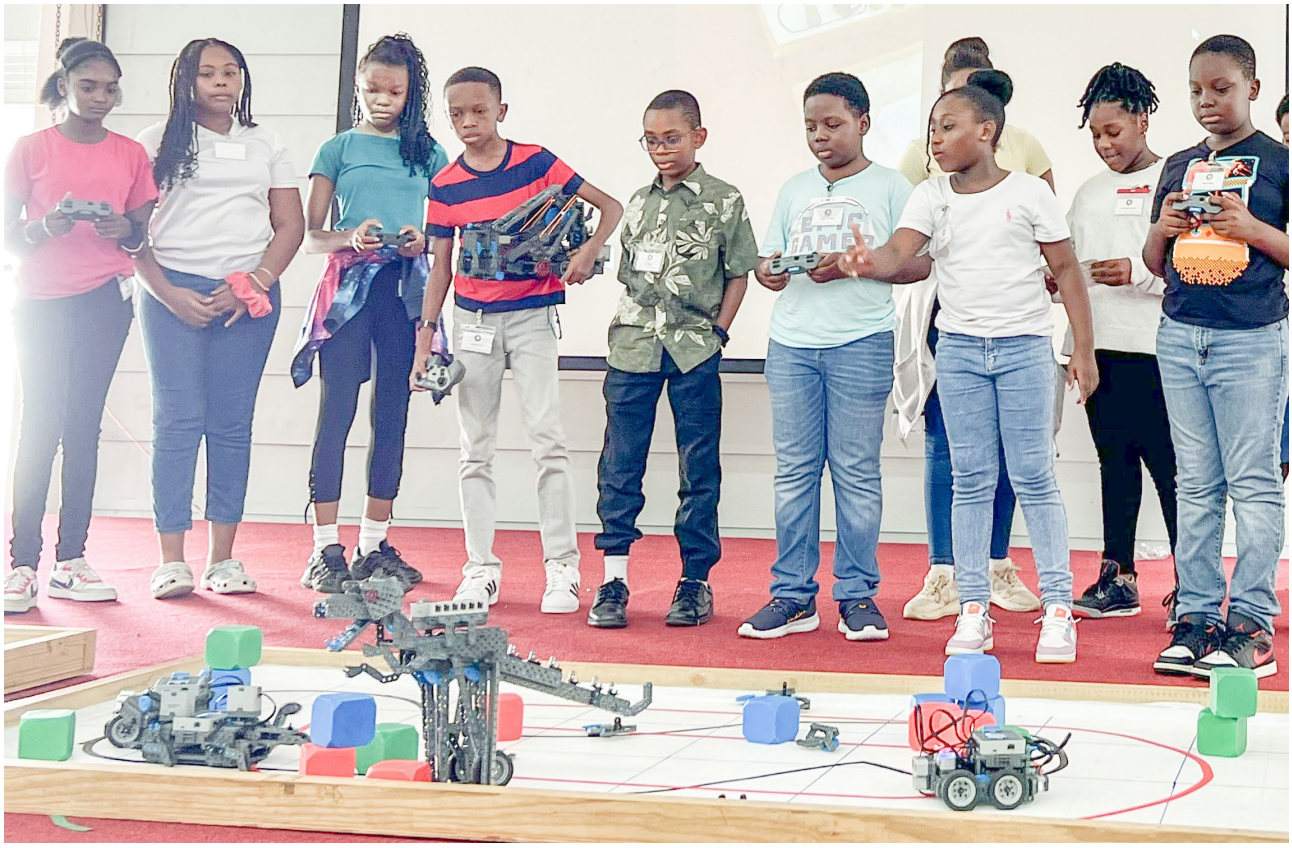
The Caribbean Science Foundation (CSF) in partnership with the University of the West Indies (UWI) Cave Hill Campus offers the Barbados Junior Robotics Camps (BJRC) annually as a summer enrichment program for students 10 – 18 years of age. This year, 75 students participated in the 5-week long BJRC which took place on the UWI Cave Hill Campus from July 15th to August 16th. With the guidance of trained coaches, the 75 campers celebrated their new knowledge and accomplishments with an exciting demonstration of their robots on August 15th at the Final Projects Showcase which was also streamed virtually.

The BJRC curriculum introduces students to Science, Technology, Engineering and Math (STEM) and robotics through team-based projects in a fun environment. The campers are exposed to the basic components of robots and see examples of how science and math are applied to engineering. The campers are separated into four levels based on age and previous experience or knowledge of robotics. All levels of the camp reinforce critical, logical and analytical thinking. Teamwork is an essential skill that is emphasized at all levels of the camps. The camps also offer personal development sessions which build confidence, as well as social, communication and conflict-resolution skills.

Specifically, the Level I Camp focuses on tele-operated robots after the campers learn basic concepts that include simple machines and motion, motors, gear ratios, sensors and friction. It also introduces the students to the basics of programming in Scratch. The Level II Camp focuses on designing and building completely autonomous robots that can navigate a sophisticated obstacle course. The Level III Camp focuses on both tele-operated and fully autonomous robots that require more complex programming with languages such as AppInventor and Python. Some of the campers work with maps for navigation, and many of the robots are controlled by Arduinos. In Level IV, the campers build their own robots from a given set of components. Level IV robots must also include the use of a microcontroller that is programmed with C++ or Python. In addition, advanced Level III and IV campers are given the opportunity to 3-D print some of the parts for their robots.

Professor Cardinal Warde of MIT who serves as the Interim Executive Director of the CSF, noted that while the BJRC was successful in increasing enrolment overall, more work still needs to be done to encourage females into robotics and STEM. “The CSF has a goal of an equal number of boys and girls in the BJRC. In 2024, this was achieved in the Level IV Camp only. We remain dedicated to stimulating STEM curiosity in girls and exposing them to various topics in STEM. We encourage all campers to consider STEM-based career paths”.

The 2024 BJRC was supported financially by the Massy Foundation-Barbados, the Archer Daniels Midland Company, CIBC Caribbean, the Central Bank of Barbados, and the City of Bridgetown Co-Operative Credit Union.
For more information about the BJRC, visit https://caribbeanscience.org/barbados-junior-robotics-camp/.
You can also visit https://caribbeanscience.org for more information about the CSF.
The CSF is a non-profit, non-governmental organization, whose mission is to assist with the diversification of the economies of the Caribbean Region by harnessing science and technology for economic development, thereby helping to raise the standard of living. Specifically, the CSF does this by helping to accelerate STEM education reform, stimulating technology-based entrepreneurship, and providing scientific and engineering advisory services to Caribbean governments.



***Some of the Level I campers demonstrating their robots at the 2024 BJRC Robotics Showcase***