Kids and adults alike came face-to-face with cutting-edge robotics at the Robot Rocket Rally.

The three-day event was hosted by Florida's Kennedy Space Center Visitor Complex and pulled together new robotic technology provided by NASA, universities, high schools and private industry.

The goal: encourage kids to pursue careers in "STEM" fields of science, technology, engineering and math.

One of the rally's star attractions was a full-size mockup of Robonaut 2, or R2, complete with legs.

The torso of the real R2 is already on the International Space Station, and its legs are due to travel there later this month on a cargo resupply flight.

They're set to fly aboard the Falcon 9 rocket on SpaceX-3, the third flight under the Commercial
Resupply Services contract.

Mock-ups of R2 formed the centerpiece of the rally, with crowds gathering to see demonstrations of the torso and a completed version, including legs.

Those will be launched on SpaceX-3, and once it has those legs, it will be able to move from one location to another and start helping the crew with some tasks that the crew really shouldn't have to do.

Things like cleaning handrails, measuring the airflow, taking inventory.

Also on display were tiny Cubesats – satellites small enough for a child to hold in his hand.

They're part of the Small Spacecraft Technology Program at NASA's Ames Research Center in California.

One just like these, called PhoneSat 2.5, also is set to launch on SpaceX-3.

It tests the capability of a smartphone to handle the basic needs of a spacecraft.
As the name implies, there's a phone inside the satellite, which we use for the avionics and all the processing and communications for the satellite.

And we're learning that they can, that a phone can work pretty well in space to do the things that a spacecraft needs to do.

NASA's Regolith Advanced Surface Systems Operations Robot is better known as RASSOR. Developed by Kennedy's SwampWorks laboratory, it's designed to act as a mining, excavating robot.

It's an enabling technology for NASA in that it would allow us to collect and mine, ah, water on the moon or Mars, or maybe even other things like asteroids.

With its rotating drums, RASSOR attracted questions from adults and kids alike.

They ask lots of questions. They always want to know, "Well, when is this going to go," "Has this already been there?"
And they seem to get really excited about it.

So I think it really builds awareness.

Virginia Tech Robotics brought along Charli, a small humanoid robot, and the crowd-pleasing DARwin-OP -- which was short on stature but long on charm as it walked and kicked a red tennis ball.

iRobot showed off two of its designs, the 110 FirstLook and the 510 Packbot.

It was all designed to give kids a chance to get up close to new technologies -- and get them excited about a future in robotics.

Humanoid robots are something that everyone can identify with, because they're very much like a person.

Especially children.

They go, 'Oh - that's a hand just like my hand,' and, 'This robot can help me do things
that I'll be working on in the future."