

NITK students shine at TRON Programming Contest in Tokyo

MANGALURU, DHNS

A team of undergraduate students from the Department of Electronics and Communication Engineering (ECE), National Institute of Technology Karnataka (NITK) Surathkal, -- Aayush Srinivasan, Adithya A and Asrith Singampalli -- with Adarsh A from IIT Hyderabad, won the second place in the RTOS application category at the prestigious TRON Programming Contest in Tokyo, Japan, recently.

The winning team, named VISION (Visual Inertial System Integrating On-board Navigation), impressed the judges by tackling a major challenge in modern robotics, cost and compute.

Instead of relying on expensive and bulky LIDAR sensors, the team engineered a smart solution using 'Edge AI' that generates synthetic depth data using just cameras and sensors.

By fusing this visual data with motion sensors, they created a high-precision navigation system that allows robots



Aayush Srinivasan, Adithya A and Asrith Singampalli of NITK Surathkal with Adarsh A from IIT Hyderabad at the prestigious TRON Programming Contest in Tokyo, Japan.

to see and map their surroundings using affordable, compact hardware. The international jury commended the project for its technical complexity and the implementation of heavy computational algorithms on resource-constrained embedded hardware.

TRON Programming Con-

test is a global competition organised by the TRON Forum, Japan, and co-sponsored by the IEEE Consumer Technology Society.

It focuses on the development of high-performance Real-Time Operating Systems (RTOS), embedded computing, and Edge AI solutions.

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