



Roobopoli™

promoted by STMicroelectronics, Bluenet and Perlatecnica



CHALLENGE

WHEN
June 5-6, 2019

WHERE
University of Naples Federico II
Piazzale Tecchio
Naples, Italy

Inside the MetroInd4.0&IoT 2019 IEEE Student Hackathon, STMicroelectronics, Bluenet and Perlategnica promote the Roobopoli Challenge! It is open to teams of students from all over the world, who will compete with Roobokarts. During the event there will be a large Roobopoli – size: 3x3 meters - and each team will receive the necessary materials to build their own Roobokart.

The challenge is divided in two phases. In the first phase, that will take place in Day 1 (June 5, 2019 - from 10:00 to 19:00) each team has to build its own Roobokart implementing the basic functions. The vehicle will move autonomously on the streets of Roobopoli being on track, respecting signals and traffic lights and avoiding obstacles and incidents. A jury of experts evaluates the behavior of the vehicle, awarding bonus and penalties and decreeing a provisional ranking.

In the second phase, that will take place in Day 2 (June 6, 2019 - from 9:00 to 16:00) the teams will instead be called to propose and implement innovative ideas regarding possible new features and extensions of the Roobopoli project. For the development, organizers provide additional boards, sensors, wireless communication systems, etc. The jury evaluates the originality of the idea, the realization of the project in “prototype mode” (PoC), assigning a score to the teams that, added to the score obtained in the first phase, will determine the final ranking.

The team that has achieved the highest score will be the winner of the Challenge Roobopoli!



MATERIALS AWARDS CONTACTS & INFO

Roobokarts, Sensors and Actuators, Expansion Boards will be provided by Organization.
The open source code and the installation procedure of the toolchain are available online.
Participants MUST bring their PC with a Windows Operating System

- First Place: € 300, An exclusive plaque and a Discovery kit with STM32MP157C MPU
 - Second Place: STM32 Evaluation board
- Eventually, other prizes will be announced during the event.
Winners will be awarded during the workshop closing ceremony on 6 June 2019.

www.metroind40iot.org
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