IEEE STUDENT
<HACKATHON/>

Università Campus Bio-Medico di Roma
Via Alvaro del Portillo 21 - Roma
June 4-5, 2020
36 HOURS NO-STOP

METROIND4.0&IoT

ORGANIZED BY

Università Campus Bio-Medico di Roma
IEEE Student Branch

IEEE FEDERICO II

STUDENT BRANCH
UNIVERSITY OF BRESCIA

36H

Roobopoli™

Promoted by Bluenet and Perlatecnica

Roobopoli

PERLATECNICA

BLUENET

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CHALLENGE

Inside the **MetroInd4.0&IoT 2020 IEEE Student Hackathon**, Bluenet and Perlatecnica 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 4, 2020)** 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 5, 2020)** 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.

WHEN 📅

June 4-5, 2020 / H 08.00 - 20.00
36 HOURS NO-STOP

WHERE 📍

Università Campus Bio-Medico di Roma
Via Alvaro del Portillo, 21 - Roma

UNIVERSITÀ CAMPUS BIO-MEDICO DI ROMA

UNIVERSITÀ DEGLI STUDI DEL SANNIO — Benevento

THE BIOROBOTICS INSTITUTE — Sant'Anna School of Advanced Studies - Pisa

UNIVERSITÀ DEGLI STUDI DI BRESCIA

gme associazione italiana gruppo misure elettriche ed elettroniche

MMT Gruppo Nazionale

MATERIALS

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

AWARDS

- **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 June 5 2020.

CONTACTS & INFO

www.metroind40iot.org

www.metroind40iot.org/roobopoli

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