

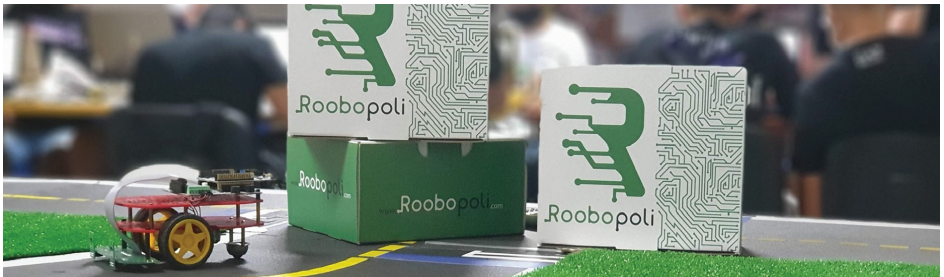
# ROOBOPOLI HACKATHON

## 7-9 June 2022

University of Trento  
Via Sommarive 9, 38123, Trento

promoted by FBK, Perlatecnica, STMicroelectronics and UniTrento

**Inside the MetroInd4.0&IoT 2022 IEEE conference**, UniTrento, Perlatecnica and FBK 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 program their own Roobokart.



**CHALLENGE 1:** Each team will have their own Roobokart already assembled and will have to meet the basic mission of the Roobokart: "The vehicle will move autonomously on the roads of Roobopoli being on the track, respecting the signs and traffic lights, temporarily stopping in the presence of obstacles and crossing the intersections by randomly choosing the direction to take among those available".

**CHALLENGE 2:** The teams will be challenged to integrate into the Roobopoli an environmental sensor developed by Fondazione Bruno Kessler, making the management of traffic lights and air analysis co-existing.

## AGENDA

June 7: introduction and starting of the competition

June 8: second day of the proposed challenges

June 9: end of the challenge, evaluation and winner ranking

### MATERIALS

The open source code here <https://github.com/Perlatecnica/Roobokart>

Bring your Windows PC and install the toolchain

<https://www.youtube.com/watch?v=2u26YWaUTws>

## INFO & REGISTRATION

