EUROPEAN ROBOTICS LEAGUE
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ALMA MATER STUDIORUM
UNIVERSITÀ DI BOLOGNA

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The SciRoc Project and European Robotics League (ERL)
present

The SciRoc Challenge

Smart City Robotics Challenge

6-10 September 2021
Bologna, Italy

Visit the website

Brochure ITA

The ERL Smart Cities Robotics Challenge (SciRoc) is a biennial event held in European Smart Cities, started and promoted by a European H2020 funded project and the European Robotics League. It offers a unique opportunity to demonstrate the benefits of using robots in different living contexts.

International teams from leading robotics companies and research labs demonstrate their technologies and systems in realistic scenarios in a smart city environment. The second SciRoc Challenge takes place in the smart city of Bologna (September 8-10, 2021) at Palazzo Re Enzo. Focused on the theme of 'Smart Inclusion', the competition will be delivered over 3 days and divided into five episodes, each consisting of a task to be performed through addressing specific research challenges. A public debate between researchers and citizens will take place on Friday evening at Cortile Guido Fanti.

The 2nd SciRoc Challenge is organised by Alma Mater Studiorum - University of Bologna, Fondazione Innovazione Urbana and Fondazione Alma Mater with the support of Comune di Bologna.

Program and Schedule

	AM (09.30 - 13.00)	PM (14.00 - 17.30)	Evening (18.30 onwards)
Monday 6th Sep*	Venue set up	Venue set up	
Tuesday 7th Sep*	Team set up	Team set up/ general rehearsal	Inaugural event
Wednesday 8th Sep	Competition	Competition	
Thursday 9th Sep	Competition	Competition	
Friday 10th Sep	Competition	Competition	Awards Ceremony Robots, Smart Cities and Inclusion - researchers meet citizens**

* Access restricted to teams and staff

** 19:30 - Cortile Guido Fanti - Piazza Maggiore, 6, 40121 Bologna BO

This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No780086.

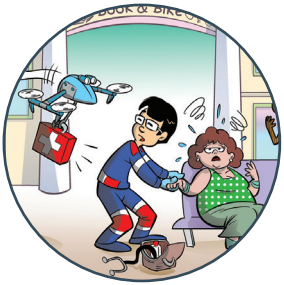
Episodes

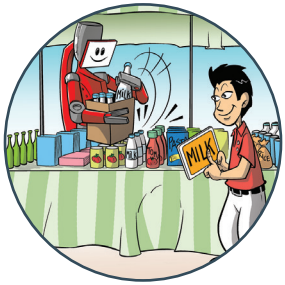
Episode 1: Coffee Shop
The robot assists the staff of a coffee shop to take care of their customers. It is required to recognise and report the status of all tables inside the shop, to take orders from customers and to deliver objects to and from the customers' tables.

Episode 2: Sign Language Interpretation
The robot operating in a coffee shop is required to interact with deaf or ear-impaired customers using the Italian Sign Language (LIS). The robot must be able to interpret the sign language expressed by humans (LIS comprehension) as well as to communicate (sign) using LIS (LIS production).

Episode 3: Shopping Cart
In this episode the robot must demonstrate its ability to correctly manoeuvre a challenging wheeled device found in environments designed for humans: the shopping cart.

Episode 4: Delivery of Emergency Equipment
A person in Bologna that cannot leave his/her home (due to quarantine related issues or a disability) requires medicine. The robot must move autonomously to the citizen's location and interact with them (in English) to deliver the proper medicine, inform about the needed dosage and, if required, accompany the person to the nearest medical centre to see a doctor.





Episode 5: Pick & Pack
The robot picks products from a storage container and places them on a designated shelf. An inspiring real scenario for this episode is the operation of an autonomous shop, where the robot helps to manage the inventory of a shop and to organise newly arrived products.

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