



RoboCupJunior RescueOnlineSimulation Rules

Before you read the rules

The rules presented here are based on the RoboCupJunior Line Entry Rules 2024, as the RescueOnlineSimulation is a simulation of the Line Entry competition. Please also read the RoboCupJunior General Rules before continuing with these rules, as they are the basis for all other rules. This document is issued by RoboCupJunior Austria. It is the responsibility of the teams to have read and understood this document and the respective Line Entry Rules. All rules of Rescue Line also apply to Rescue Online Simulation, unless otherwise stated. Unlike Line Entry, all teams use the same standard RCJ RescueOnlineSim simulated robot. However, the configuration of the robot can be modified in any way within the editor. Please note that the robot can be equipped with a conductivity sensor mounted on the front of the robot to distinguish alive from dead victims. Unlike Line Entry, all teams use the same standard RCJ RescueOnlineSim simulated robot. However, the configuration of the robot can be modified in any way within the editor. Please note that the robot can be equipped with a conductivity sensor mounted on the front of the robot to distinguish alive from dead victims.

Disclaimer: As Rescue Online As this is the first year of the simulation, we cannot rule out the possibility of unforeseen uncertainties on site. Therefore, we would like to point out that there may be last-minute changes on site, especially to the mode, as long as this does not affect fair competition. Please check back frequently for updates to this document.

Resources

Additional material and contact info can be found on robocupjunior.at/simulation.

1 Mode

This contest uses the RCJ RescueOnlineSim of the OpenRoberta Platform (<https://lab.open-roberta.org/>). Note that we will try to avoid major updates right before the competition, but be aware that some minor bug fixes may lead to variations in code performance. Teams should be prepared to make small adjustments to their code.



At the competition, participants will be asked for the program file exported from RCJ RescueOnlineSim. The computer for the competition runs will be provided, but participants should bring their own laptop to adapt their code. As in Line Entry, there will be three runs for each team. During the run, only the captain is allowed to operate the competition computer. In case of lack of progress, the captain must call a LoP, reposition and restart the program. The run with the worst score will not be counted in the final score. During the competition, the Auto LoP will be turned off, as any rule violations will be called by the referee. Any voluntary exploitation of software bugs will be treated as a violation of the rules (LoP) or disqualification in severe cases. Please note that points lost due to systematic problems (bugs) in the RCJ Rescue Online Simulation will not be refunded. This is due to the fact that every participating team has a chance to encounter the same problems. Any points lost due to temporary system failures (e.g. loss of Internet connection) will result in a rerun for the team. Although the simulation scores automatically, the referee has the final say on the final score. After each run, teams are asked to sign a form agreeing or disagreeing with their score, similar to Rescue Line. Teams must prepare for code interviews on site to prove that they understand and have written their own program. Between runs, they will have the opportunity to adjust their code. It is not allowed to hardcode any details related to the arenas. Any violation will result in disqualification.

Note that posters and code sharing, as described in Section 1 of the Line Entry Rules, are not part of the Rescue Online simulation.

2 Scenario

The scenario and scoring remain the same as in Line Entry. Note that hazards that are only a physical/hardware challenge do not exist in the simulation. These include seesaws, speed bumps, ramps, and debris. The arena may contain intersections, obstacles, and gaps. All silver reflective surfaces from Line Entry will be displayed as cyan surfaces in the simulation. The arenas for the competition are created with the map editor mentioned in the resources.

3 Robot

Unlike Line Entry, all teams use the same standard RCJ RescueOnlineSim simulated robot. However, the configuration of the robot can be modified in any way within the editor. Please note that the robot can be equipped with a conductivity sensor mounted on the front of the robot to distinguish alive from dead victims.