

# RoboCup2021 Junior Rescue New Simulation (Demonstration) League Team Qualification Guideline

# About:

This document outlines the selection process of teams who wish to compete in the New Simulation (Demonstration) league (New Sim here onwards) in the 2021 RCJ international event.

# Selection process and who can participate:

This is the selection process for teams who would like to participate in the New Sim. If a team knows they are participating in a different RoboCupJunior league/sub-league, please do not apply for this selection process.

If a team does not know whether they will be participating in a different RoboCupJunior league/sub-league (e.g.: the regionals did not happen yet), they may submit an application to this selection process. However, they **must** choose between New Sim or <u>an alternative sub-league</u> to participate in the international event.

There are two steps to the application process.

- 1. **Register with the submission system:** Here you will input your team name, name, age, region, possibility of participating in a different RoboCupJunior league, etc. You will also receive an email with the submission link.
- 2. **Submission:** From the submission link you received right after registration, submit all relevant documents which will be used for the evaluation.

The team selection will be announced on <u>28th of May 2021</u> alongside a waiting list if the number of teams exceed our capacity. Teams on the waiting list will be contacted immediately if a spot opens up.

### Submission items and deadline:

Every team to be considered to the selection must submit

- A short Team Description Paper (TDP)
- Screen recording of your simulation run
- Code used to run the simulation

The deadline for registration is **<u>16th May 2021 23:59:59(UTC)</u>**.

The deadline of submission is 21st May 2021 23:59:59(UTC).

Please visit the <u>Erebus selection page</u> on the RCJ Rescue community website for both registration and submission links.

### Selection criteria:



At a high level, each team will be evaluated by their current progress and potential improvements until the competition. Based on the submission items, teams will be ranked. From the top to bottom, a team from each country will be selected. Until the number of teams exceeds the maximum capacity, this process is continued. The remaining teams will be on the waiting list.

The ranking is decided by RCJ Rescue TC and OC, and will be based on a rubric and discussion looking at:

- Ability to navigate the maze in all three areas.
- Ability to detect victims.
- Ability to map the maze.
- Description and understanding of each implementation.
- Robustness of the strategy/algorithm.
- Key challenges encountered. How they were solved / are being solved.
- Innovative techniques explored/that are being explored.
- Plan until the international event outlining what issues will be solved and how.

### Details on submission items:

- TDP
  - Please use the provided temple either in <u>Word</u> or in <u>LaTeX</u>.
  - Few sentences about the team and past experiences (not necessarily just RoboCup) if any.
  - Aim of the team for this competition.
  - Overall strategy of the robot (indicating what is currently implemented and what is not).
  - Technical description of relevant sections (navigation, mapping, detection, etc).
  - Outline of a plan including technical steps tackle unresolved problems in the overall strategy.
  - Teams may include an appendix for additional information. However, it must be noted that the main text itself should work as a standalone document (and the assessment will be based on the main text). Teams may link to external documentation as an alternative to the appendix.
  - Maximum 5 Pages.
- Screen recording
  - Screen recording of *one run* of your simulated robot on a provided field. The field will be provided in due course and will be announced on all relevant channels.
- Code used to run the simulation
  - All controller programs used
  - Customised robot json file (if a customised robot is used)
  - File containing the programming environment (language versions + library versions)