

# Bear Rescue

Task of the robot is to find a lost bear and bring it back home as fast as possible.

## 1. Contest description

After being started, the robot has to travel across the playing field, find the bear and bring it back to the starting place. Robots are ranked based on the time they spend for the rescue task.

Before the start, the participants prepare the robot so that it touches the back wall of the starting area. Since then, no intervention is allowed. After the preparation, the referee places the bear somewhere in the target area. The participant starts the robot on a referee's signal. The time is measured from this signal to the moment when the robot returns and both the robot and the bear fully cross the marked line. If this time exceeds 5 minutes, the referee will terminate the race. The organizers may allow repeating races or rounds; only the best time of all attempts of a robot will be used for ranking in this first part of the contest. In the finale part, the races will be held on a knock-out basis. In case of a tie, a repeated race may be ordered by the organizers. If it results in a tie again, performance of the two robots in qualification may be considered.

## 2. Robot

The robot must not be dangerous or excessively annoying.

The robot is autonomous. Throughout the race (including the start) no external connection is allowed. Since the robot is prepared for start, it must not be touched or interfered with in any way except starting until the referee allows so. On its top side, an emergency switch must be located. By pressing it all actuation must be switched off. The switch must be big enough and well distinct so that it can be easily recognized, reached and used.

A 10x7 cm space for marking must be reserved on the robot's top side.

At start time, the robot must fit inside the starting area; otherwise, its size is not limited.

The teams will also provide at least 2 photographs/images and 2 paragraphs of text describing the robot/team in electronic form for publishing purposes prior arrival to the competition (via the registration application).

## 3. Playing field

Playing field ground is white. The playing field is bordered and contains inner walls forming a "meander". Both the border and the inner walls are approx. 10 cm high. The robot must not pass or "lean" over the walls but it may "look" over them. The robot starts from the back side and the bear is lost in the front side of the playing field (see the picture; the hatching and the blue lines are not drawn on the playing field and serve here only for explanation). The playing field may be composed of more pieces with slight level differences.

## 4. The bear

The bear is a stuffed teddy bear. It is not smaller than 10 cm and not bigger than 30 cm. It is sufficiently contrast in comparison to the ground. It is not live, not moving and its weight is appropriate.

## 5. Power of officials and liability

If a robot or a participant violates the rules, the referee may disqualify them from the race. He may also disqualify the participant or the robot for further races.

No objections against the decisions of the referee or the organizers are allowed.

The organizers may change the rules without prior notice, e.g. based on number of participants, local conditions etc.

The participants are responsible for their robots and their safety and will be liable for all damages caused by them, their robots or their equipment.

The organizers will not be under any circumstances held liable or responsible for any accidents of the participants or any damages caused by the participants, their robots or their equipment.

