**RoboCupJunior Rescue Maze – Rules 2020 (short version)**

* Full autonomy
* Max. sensor position **15 cm** above the tile
* Max. robot height **30 cm** above tile (minus **2 cm** because of speed bumps or steps)
* Max. robot width **20 cm** (minus needed free space for moving)
* Min. dimension of **1 cm3** of rescue kit
* Max. number of rescue kits: **12**
* Tolerance of all measurements:
* Min. obstacle height: **15 cm**
* Min. distance of recognized victim: **15cm**
* Lasers **1 or 2 class** (with datasheet)
* Can use only communication between two robots is via **Bluetooth class 2 or class 3** (range shorter than **20 meters**) or ZigBee
* Max. scoring round time: **8 min**.
* Sign for recognized victim= blink, audio noise of 5 sec. duration, position within **15 cm** near to the victim
* Which part of the robot has to be 15 cm near to the victim?
* No turning in black tile (can only move backward)
* Max. ramp angle: **25**
* Engineering Journal Template

**Objects for recognition:**

* Start/end tiles color=?
* Obstacles min. height of **15 cm**, maybe any shape including rectangular, pyramidal, spherical or cylindrical
* Black tiles
* Silver tiles
* Heatedvictim, **16 cm2** area of heat radiation, temperature between **28-40**
* Colored victim, color area of **4 cm2**, colors; red, yellow and green
* Visual victim, black letters, font style like Arial, height **4cm**, width=?



* Victim position about **7 cm** above the floor tiles

