

Marker search competition rules

I. Definitions

1. Intelligent Autonomous Vehicle – electro-mechanical construction capable of moving and performing actions autonomously
2. Competitor – member of a registered team
3. Organizer – Department of Robotics and Decision Systems, Faculty of Electronics, Telecommunications and Informatics at the Gdańsk University of Technology
4. Construction – vehicle qualified for the competition.

II. Goal

1. Main goal of the competition is to promote the use of autonomous flying vehicles to search for objects.

III. Requirements

1. Registration for the competition may take place via the organizer's webpage: <https://eti.pg.edu.pl/safeidea/iav-cup-2018/en>
2. Qualified teams will receive confirmation from the organizer by email
3. In the absence of a team member, substitution is possible provided that the team notifies the organizer at least 3 days before the event
4. The team can consist of up to 5 members.

IV. Competition rules

1. The task of the drone is to find and locate 8 Bluetooth Smart markers
2. Each team must indicate the location and marker identifier (UUID) on the map
3. For each correctly localized marker, the team receives 10 points
4. Each team will have a maximum of 20 minutes to localize markers
5. The map and the UUID tags will be published on the website 14 days before the competition
6. Search competition is divided into two categories: supervised and autonomous
7. The final grade is determined on the basis of the map with the given UUID identifiers and delivery time.

V. Marker specification

1. 24 markers will be placed in the field
2. Position of 8 active markers (to be found) is random
3. Marker is a Bluetooth Smart beacon with a specified UUID
4. Data will be broadcasted in the standard provided on the organizer's webpage.

VI. Prizes

1. Top three teams will receive an award.

VII. Final provisions

1. The organizer is allowed to change the rules before the competition
2. Matters not mentioned in these rules will be resolved by the main referee
3. It is not possible to appeal from the decision of the main referee
4. The organizer is not responsible for damage caused to vehicles during the competition
5. In case of bad weather conditions, the organizer may change the place and/or time of the competition.