

ROBOTICA 2011
FESTIVAL NACIONAL DE ROBÓTICA

Competition

Rules, Evaluation criteria, and
Program

FREEBOTS

(January 12th, 2011)

Rules

During the competition, each team has to

- (1) make a technical presentation of their demo to the jury,
- (2) make a short public demo to the general public, together with a short non-technical presentation, and *possibly* a
- (3) public extended demo, being challenged by the public and/or the jury.

The evaluation of the jury comprises two stages. In the first stage the jury selects a subset of 5 finalist teams (the ones allowed to perform the extended demo), and in the second stage the winner is selected.

The jury composition must follow these guidelines:

- 2 renowned researchers (with a PhD)
- 2 renowned industry persons
- 1 member of the competition Technical Committee (TC)

Evaluation

The evaluation made by the jury in the two stages must follow the following criteria:

- A. **Technical-scientific quality** of the proposal, evaluated based on the technical presentation to the jury. **Weight = 2**
- B. **Capability to present the solution to the public**, evaluated based on the way the public demo is carried out by the team. **Weight = 1**
- C. **Application potential**, evaluated based on the whole performance of the team. **Weight = 2**
- D. **Quality and success of the demo**, evaluated based on the public demo. **Weight = 3**

Each member of the jury assigns 0-10 points per criteria. The points assigned by each member are summed up, and the teams are ranked according to this sum. In the case of ties, the jury can vote on the ordering of the tied teams.

Before the competition

The Technical Committee (TC) of this competition is responsible to distribute a Call for Participation (CFP) aiming the international research and development community, detailing the competition goals and the requirements participating teams must meet that year, as well as the operational procedure teams must follow to apply.

After the deadline for the submission of participation applications, the TC performs a pre-selection of the teams *exclusively based on the adequacy of the proposals with respect to the CFP*. Then, the selected teams are informed. The participating teams must sign an agreement binding them to the participation in the competition.

The next phase consists on a bidding of the participating teams for physical resources in the competition arena. These resources include space, power, networking, and others. Because resources are limited in the arena, the TC, together with the local organization, will attempt to fairly distribute the available resources among the teams, but may need that the participating teams bring part of or all the de demo infrastructure. The TC and the local organizers are then responsible to assure that the agreed resources are made available to the teams in the competition arena.

During the competition

The competition takes place during 3 days, according to the following schedule:

Day 1 – setup

The first day is reserved for the hosting and setting up of the teams. During this day, the agreed resources are checked, and the teams can start working on their demos right away.

Day 2 – technical presentation to the jury

Each team is asked to perform a technical presentation to the jury, detailing the technical aspects of the demo. This presentation will be closed door, lasting up to 20 minutes per team plus 10 minutes of questions and answers. The jury evaluates each team with respect to the technical scientific quality of their approach, and to the application potential of the solution.

Day 3 – public presentation

The main part of the competition takes place in this day. It is divided in two stages.

In the *first stage*, all teams are asked to perform their demo to the public, together with a short presentation, aiming at the general public, focusing on the potential applications of the proposed solution. Each demo lasts a maximum of 15 minutes.

These demos are then evaluated one by one publicly by the jury, whose elements vote individually each of the criteria in the Evaluation section, raising panels with the corresponding grade (0-10). The top 5 teams in this ranking go to the final second stage.

The 5 finalist teams are the only ones that participate in the *second stage*, where each team has 30 minutes to perform an extended demo, and answer questions/challenges from the audience and the jury.

The extended demos of each team are again publicly evaluated by the jury, following the same procedure as for the first stage evaluation. The top team will be declared the **winner** of the competition.

After the competition

After the competition, teams are allowed to refer to their participation in this competition in one of the following ways, depending on the achieved result:

- Participation in the FREEBOTS competition in FNR, 20xx (all teams)
- Finalist of the FREEBOTS competition in FNR, 20xx (5 selected finalists)
- Winner of the FREEBOTS competition in FNR, 20xx (winner).