

Rules of Simulation 2D League RoboCup China Open 2008, Zhongshan

September, 2008

Abstract

This document contains the rules of Simulation 2D League of *RoboCup China Open 2008, Zhongshan, Dec. 5-7*. **More information and any later modification** about the rules will be announced at:

<http://www.rcccaa.org/>

<http://www.robochina.com.cn/>

1 Soccer Simulator

The **SoccerServer version will be announced soon**. Note that the number of halves and the switch of penalty shootouts will be changed according to the round.

2 Machine Configurations

Each team will be allowed to use 4 machines for their game. Teams can only use **Linux operating system**. Teams can not use the competition machines to hack their program, but 2 machines will be available for the test.

2.1 Operating System

OpenSUSE 11.0 will be used.

2.2 Hardware Specification

Details will be announced soon.

3 Schedule

- **Dec. 5th:** Round Robin for Top 16
- **Dec. 6th:** Round Robin for Top 8
- **Dec. 7th:** Double Elimination Round and Place Matches

4 Tournament Modus

4.1 Automatic Matches

All matches will be started automatically by the league manager script or by human referee. Please note these important points:

- Teams are only allowed to update their binaries by **30 minutes** before the first game starts in a day.
- You need to provide 9 small scripts starting and killing your team. The sample scripts will be published soon. Please have a look at them. It should be fairly easy to adopt them for your team.
- In order to test the automatic running games script (the league manager), teams have to finish testing their binaries and scripts on a competition machine by **20:00 on Dec. 4th, 2008**.
- Scripts will be executed by a different user in your user group. Your scripts and your team have to be at least group readable and executable.
- The scripts should use absolute paths or change to the respective directories.
- Double check that your kill scripts kill all of your programs (goalie, players and coach), even if your programs terminate automatically.
- In the **Double Elimination Round and Place Matches**, the penalty shootouts will be started automatically after the extra halves if the game ends with a draw. Make sure your team can handle this. If it does not work, we dont fix it.
- Do not output many data to stdout, stderr and files in your home directory because it might cause a serious network delay.

4.2 After Competition

Teams will be published automatically after the competition. To help us with publishing your team, create a **TEAMNAME.tar.gz** file in your home directory before the final round. In case a team fails to provide this file, we will publish the complete home directory of that team.

5 General Tournament Rules

Details will be announced after the deadline of registration (**Oct. 30th, 2008**).

6 Tiebreakers

Tiebreakers between $n \geq 2$ teams in the first two rounds will apply in the following priorities:

- 1 points.
- 2 head-to-head results.
 - for $n = 2$, this breaks the tie if and only if the head to head match was not a draw.
 - for $n > 2$, this breaks the tie if and only if one team won against all other teams who are tied.
- 3 Overall goal difference for this round.
- 4 if $n > 2$, overall goal difference including only games with the tied teams.
- 5 Overall number of goals scored.
- 6 if $n > 2$, overall number of goals scored including only games with the tied teams.
- 7 Penalty shootouts between the tied teams. Details of the structure will be announced soon.

If $n > 2$ teams are tied, then the above list of tiebreakers is used until 1 team can be put first. That one team is ranked first and the remaining teams are grouped into another tiebreaker, and the criteria are applied from the beginning of the list.

7 Drop Ball

In certain situations, like free-kicks and kick-ins, the game is stopped. If a team fails to put the ball back into play after a free kick, a drop-ball is given after 200 cycles automatically. If repeatedly no player of the team that has to perform the free kick displays efforts to move towards the ball, the waiting time can be suitably shortened by the referee dropping the ball manually. The goal is always to keep the game running as smoothly as possible while giving the teams a fair chance to exert their rights. Ball drops should be as near as possible to the current position of the ball or on the corner of the penalty box.

8 Code of Honor

8.1 Coach Messages

The coach can issue arbitrary "freeform" messages during non-play-on mode. The coach can send one advice, one info, and one define, every 30 seconds - the rest will be ignored by the server. Therefore, the coach shall not send more than 4 of those standard-language directives per 30 seconds, so as to not flood the network.

8.2 Fouls

Free kicks and kick-ins are detected automatically by the soccer server in many relevant cases. Sometimes, however, fouls occur which can only be detected by the human referee who has to award a free kick to the disadvantaged team. Reasons to call a foul are:

- If one team surrounds the ball so that the other team can not kick.
- If the goal is blocked by so many players so that the ball could not go in (rough guideline: a wall of players blocking the goal).
- if a team intentionally blocks the movement of opponent players.
- Anything else that appears to violate the fair play commitment may also be called as a foul after consultation with of technical committee.

9 Fair Play

The goal of the game is to play soccer according to fair and common sense understanding of soccer and to the restrictions imposed by the virtual simulated world of the soccer server. Circumvention of these restrictions is considered violating the fair play commitment and its use during the tournament games is strictly taboo.

Violation of the fair play commitment includes for example:

- Using another team's binaries in your team.
- If a team is jamming the simulator by sending more than 3 or 4 commands per client per cycle.
- If a team communicates by other means than via the server using the "say" command, for example by using direct inter-process communication.
- If a team attempts to disturb other team's communication by recording and sending strings of former communication or by attempting to fake communication of the opponent team.

Any of these is strictly forbidden. Other strategies might be found violating the fair play commitment, after consultation with the technical committee. However, we expect it to be pretty clear what a fair team should look like. In particular, the destructive disruption of opponent agent operation or the gain of advantage by other means than explicitly offered by the soccer server count as not fair play. If you are in doubt of using a certain method, please ask the simulator technical committee before the tournament starts. If a team is under suspicion of violating the fair-play agreement, the technical committee has the right to ask for source code inspection.

If a team is found to use unfair programming methods during the tournament, it will be given disciplinary punishment according to the the gravity of the situation. (i.e. Disqualification for this year's competition or disqualification for RoboCup China Open 2009.)

10 Remote Participation

We will not have the resources to search for problems in remote participants' startup procedure, so in their own interest, remote participants are asked to make sure that a 3rd party (i.e. we) can start up your code easily and smoothly on a platform that might be different from their development platform.

Each remote participant should send your team's binay to *shike15@mail.ustc.edu.cn* before **8:00 on Dec. 2nd, 2008**.

11 Other

Any rule above which will conflict with the new rules of **RoboCup Simulation League** will be modified before the competition. *The Technical Committee* of Simulation 2D League of RoboCup China Open 2008 has the right to interpret all these rules above.

References

- [1] Rules Soccer Simulation League 2D RoboCup2007 Atlanta. June 17, 2007.