

## **Mars 2013 Team Description Paper**

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**Abstract** :In this paper a summary of high level skills and team decision-making structure is simulated Mars.

### **Introduction:**

Your Mars team members activities since 2007 in various leagues, including the next 2D Soccer Simulation start. To the activities of the members of the team to participate in the League the 2D Soccer Simulation, 3D soccer simulation, Rescue Robot and humanoid robots.

The records for the team members participate in the RoboCup iranopen (2007-2011) and the reception in three world series with teams including sama3d, Ariana & ava and GPC can be.

Our team-up on your Base Code Agent2D of the year 2010 started the team, with the design and implementation of the necessary Skill and decision and great success has been the utility the field hand.

### **Mars Utility:**

The team, to test, fix bugs, improve their skills and the structure of the decision to start the design of a monitor for the team. This software uses the socket makes it possible to test the way online and offline to us.

One of the features of the full control on the Monitor Agent and also draw Geometric shapes when playing. Also this monitor to check the correctness of the implementation of a skills can be used. This monitor is compatible with the server is 15 and all the parameters of the server encoding.

This monitor has a very simple structure and is the same reason makes the rest of the team are able to simply use it. This causes the March team members intend to publish in 2013 this monitor.



Figure-1

### Clustering Pitch :

We have to speed up a decision the team decided the playground with the parts we subdivisions for the players understood this in the Map Class are doing In this Division of land into 32 districts have segmentation method of a kind of Division is designed to be the player to easily access his adjacent parts of the view report could not find your consolidation didn't last, simply use this method for the structure of the decision-making team and Positioning is used to help players to gain insertion speed.

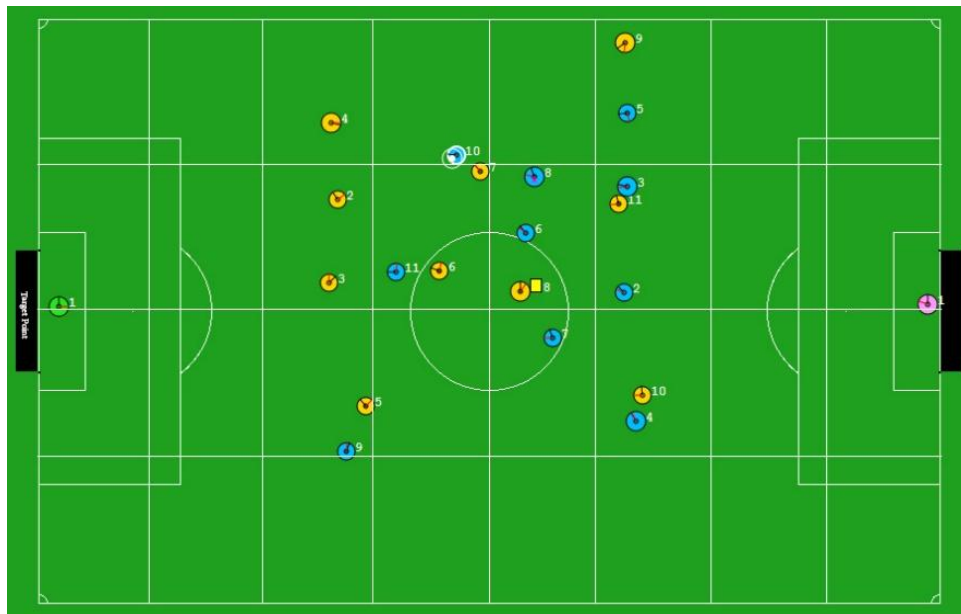


Figure-2

## Line Scanner :

To find the best paths inside the Earth from this class is used as the best way to select a plan and after choosing the path of using their skills with respect to the likelihood of the success of the it skills of a queue to be sorted at the discretion of the structure puts a decision according to the chosen plan the best skill is preferred in this structure is a decision each player according to their skills and the probability of success in each skill The proposed plan will help run and in some cases the scanning direction faced with restrictions to the existing price plan after modifying the plan of this operation for all players is done and in the end the best plans compared to the skill level of the players runs.

## Dynamic plan :

For a more thorough implementation of the skills the player of this class uses that classification, the Class Map for a closer and more dynamic, allowing players to do that also to be able to accurately identify the team plan of this structure with the rating of all the best parts of the line received best scanner position for Player update does this work makes the players of different methods used in decision-making and There are various ways to get to the gateway using the opponent in this way we to better track and path points suggestion and chosen and the player with the difference of individual abilities to implement this plan and track the implementation of other players for the moment.

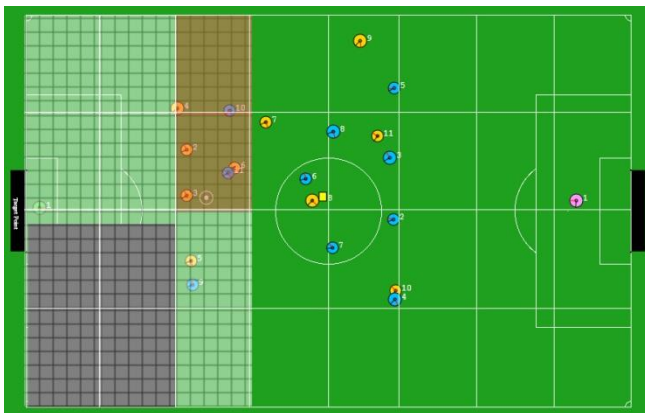


Figure-4

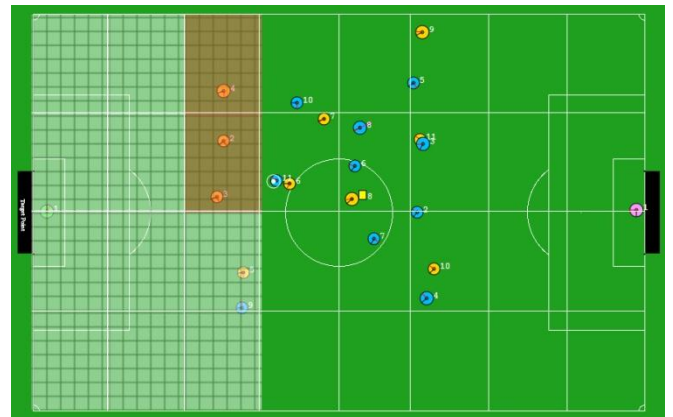


Figure-3

**References :**

- 1: <http://sourceforge.jp/projects/rctools/>
- 2: [http://wiki.robocup.org/wiki/Soccer\\_Simulation\\_League](http://wiki.robocup.org/wiki/Soccer_Simulation_League)