SSL Members Survey Responses - Sept 23, 2011

Question 1

1. What is your team's name ? Download

(19 responses)

Bochica
Botnia Dragon Knights
BRocks
CMDragons
Eagle Knights
ER-Force
Immortals
KIKS
ODENS
Omid
Owaribito-CU
RoboDragons
RoboFEI
RoboJackets
RoboTurk
Skuba
TIGERS Mannheim
UBC Thunderbots
ZJUNlict

Question 2

2. Please enter the number of team members according to their academic level. Please use Researchers for graduated professionals not enrolled in postgrad courses Create Chart Download

	Response Average	Response Total	Response Count
Undergraduates Show Responses	**9.11**	**173**	19
Masters Show Responses	1.75	28	16
PhDs Show Responses	0.75	9	12
Professors Show Responses	1.06	18	17
Researchers Show Responses	0.27	3	11

Question 3

3. Please enter the number of team members according to their area of academic specialization. Download

(totals)

Electrical Eng .	67
Mechanical Eng .	37
Mechatronic Eng.	15
Control Eng	11
Computer Scientists	81
Mathematicians	2
Physics	1
Others	
Physics Eng.	2
Aerospace Eng.	2

Question 4

4. What level of effort does your team intend to put in the following areas until RoboCup 2012 ? Create Chart Download

	Nothing	Very small	Small	Big	Huge	Rating Average	Response Count
Design of Robotic hardware	0.0% (0)	31.6% (6)	21.1% (4)	**42.1% (8)**	5.3% (1)	2.21	19
Robot's Motion Control	0.0% (0)	5.3% (1)	**47.4% (9)**	36.8% (7)	10.5% (2)	2.53	19
Path planning and obstacle avoidance	10.5% (2)	21.1% (4)	**42.1% (8)**	15.8% (3)	10.5% (2)	1.95	19
Improvement of basic actions (shooting, passing)	0.0% (0)	5.3% (1)	21.1% (4)	**57.9% (11)**	15.8% (3)	2.84	19
Team Tactics	0.0% (0)	5.3% (1)	15.8% (3)	**63.2% (12)**	15.8% (3)	2.89	19
Multi-agent cooperation and Opponent	10.5% (2)	21.1% (4)	10.5% (2)	**42.1% (8)**	15.8% (3)	2.32	19
Research papers writing/publication	0.0% (0)	21.1% (4)	36.8% (7)	**42.1% (8)**	0.0% (0)	2.21	19
Other RoboCup leagues	**57.9% (11)**	5.3% (1)	21.1% (4)	10.5% (2)	5.3% (1)	1.00	19

Question 5

5. Please rate how your team feel about the following possible changes in the League for 2012's competition

Create Chart | Download

	Strongly Disagree	Disagree	Agree	Strongly Agree	N/A	Rating Average	Response Count
Increase field size to around 5x7 m.	15.8% (3)	26.3% (5)	**31.6% (6)**	21.1% (4)	5.3% (1)	0.17	19
Reduction of ball speed	15.8% (3)	10.5% (2)	26.3% (5)	**42.1% (8)**	5.3% (1)	0.72	19
Increase number of robots to 6	15.8% (3)	21.1% (4)	**42.1% (8)**	21.1% (4)	0.0% (0)	0.32	19
Increase size of the goal area (to keep defenders farther away)	5.3% (1)	10.5% (2)	**52.6% (10)**	26.3% (5)	5.3% (1)	0.89	19
Offside Implementation	33.3% (6)	11.1% (2)	**50.0% (9)**	0.0% (0)	5.6% (1)	-0.29	18
Presentation of electrical and mechanical designs of all teams	5.3% (1)	10.5% (2)	**42.1% (8)**	21.1% (4)	21.1% (4)	0.80	19
					Please add comments Show Responses		8

Comments
(8 comments)

Offside Implementation: This is going to be extremely hard to referee. There is already a lot of dispute about the "multiple defense" rules. It is not going to get better with offside rules. Increase size of the goal area (to keep defenders farther away): This goes hand in hand with an increased number of robots / field size. On the current field the size of the goal area is fine. Reduction of ball speed: A limitation to 8 m/s could be a good idea. We should implement a checking procedure. Maybe even during the game. 8 m/s ball speed should be easier to measure using the current vision system. Presentation of electrical and mechanical designs of all teams: Presentations always suffer during the event due to the lack of time. Maybe encourage the teams to make a section on their website about their robot designs. The team with the best hardware page gets a big box of cookies ;-)

We like the idea of a larger field for developing game play, but this would cause our team (and probably may others) severe difficulty in finding adequate field space for testing at our university. Currently, almost all teams can reach the max ball speed, so no one has an advantage there. A reduction in the ball speed would give the bots a better chance at stopping, intercepting, and catching the ball, making gameplay tactics more interesting. Increasing the goal area would also make AI tactics more interesting because of the increased level of difficulty. Given the fast pace of the game, offsides would be very difficult to track (especially for humans), and robots would undoubtably be offsides very often, adding a lot of unwanted stoppage to the game (how about "indoor" soccer instead, where robots can bounce balls off the walls without an out-of-bounds?) 6 robots would clutter the small field and cost every team more money. Presentations are a great way to share and collaborate, and help the league further develop technically.

The speed of the ball does not correspond to the real speed of the ball during a real soccer game. It also restrain teams to perform passing and others interesting multi-agent behaviors.

it should be re-evaluated. About 6 robots, it may help to create smarter plays. Increase of the field size and goal area should be considered at least in the roadmap.

Big rule changes such as increasing number of robots should be done after at least 1 year from decision.

Increasing size of the goal area and field persuade teams to improve team tactics and accuracy.so we are agree with this following changes!

We agree with the 6 robots on condition that the field size increase. Offside Implementation is "Strongly Disagree" because of the current status of the SSL league.

It could be interesting if robot's speed is also reduced

We think guiding newer teams about mechanical and electrical design would be nicer than just giving them complete designs.

Question 6

6. How does your team feel about the competition challenges ? Create Chart Download

	Strongly Disagree	Disagree	Agree	Strongly Agree	N/A	Rating Average	Response Count
Mixed Teams Challenge	0.0% (0)	10.5% (2)	**57.9% (11)**	10.5% (2)	21.1% (4)	0.87	19
AI focused Challenge	0.0% (0)	5.3% (1)	26.3% (5)	**52.6% (10)**	15.8% (3)	1.50	19
Navigation-style Challenges	0.0% (0)	5.3% (1)	**68.4% (13)**	10.5% (2)	15.8% (3)	1.00	19
					Other challenges and/or comments Show Responses		6

Comments
(6 comments)

In our opinion the Mixed Teams Challenge is developing in the wrong way. For the 2011 Mixed Team Challenge no much interaction between the teams was necessary (one team could play defense, one team offense) compared to the challenge in 2009 (goal only valid if touched by robots from both teams). It is difficult, because the teams don't really have time to prepare and it is quite difficult to participate especially for new teams. Still an interesting challenge.

Our team thought all the challenges were great! We'd like to see new challenges that haven't been tried before, more variety.

We do not have enough human resources to develop the system for challemges.

Mixed Team challenges should be setup with months in advance, to allow teams to actually form bonds between themselves. AI Focused challenges are extremely important, but also need prior discussion with the teams so the goal can be achieved.

Vision system challenge (Semi)Automated referee challenge

If it's possible all team show the demo of their skill and ability it's very attractive. The kick accuracy and control is important now!You can add this item to challenges.

Question 7

7. How important you think that developing each of these open source software are for the league ? Create Chart Download

	Not important	Somehow important	Important	Very important	N/A	Rating Average	Response Count
SSL-Vision Plugins	5.3% (1)	31.6% (6)	**42.1% (8)**	21.1% (4)	0.0% (0)	0.42	19
SSL-Vision Log-Player	10.5% (2)	26.3% (5)	**57.9% (11)**	0.0% (0)	5.3% (1)	0.11	19
Referee Box (the existing)	15.8% (3)	21.1% (4)	**36.8% (7)**	26.3% (5)	0.0% (0)	0.37	19
Automated Referee	21.1% (4)	21.1% (4)	26.3% (5)	**31.6% (6)**	0.0% (0)	0.26	19
Standard Simulator	10.5% (2)	10.5% (2)	31.6% (6)	**42.1% (8)**	5.3% (1)	0.89	19
					Others (please specify) Show Responses		4

Comments
(4 comments)

Automated Referee: In our opinion it is not feasible to go from 0 to automated referee. We think we should first implement a referee assistance system, e.g. plugins in the referee box that check the ball speed, multiple defense, etc. As soon as we are happy with the output of such a system and we have implemented all necessary rule checks we can start thinking about autonomous refereeing. SSL-Vision Plugins: Some kind of autocalibration should be high on the list.

Although not critical to the league, an automated referee would be a great initiative and has a lot of support from our team. Sooner or later, it is something that should definitely be developed. Some software members think the ref box could use some tweaks and touch-ups. We already have a game logger, so we don't need an SSL vision logger. Standard simulator would make it a lot easier to develop our AI! It could also open the doors to having team's from around the world compete and collaborate remotely to test and develop AI (our team likes this idea because we're the only Canadian team. We have to travel a loooong way just to have some practice matches!)

SSL-Vision for Windows, SSL-Vision for USB cameras

We think the development of SSL-Plugins for the automatic calibration is important.

Question 8

8. Would your team like and have resources to help develop these open source software ? Create Chart Download

	Yes	No	Maybe	Response Count
SSL-Vision Plugins	21.1% (4)	**52.6% (10)**	26.3% (5)	19
SSL-Vision Log-Player	15.8% (3)	**47.4% (9)**	36.8% (7)	19
Referee Box (the existing)	10.5% (2)	**57.9% (11)**	31.6% (6)	19
Automated Referee	26.3% (5)	**36.8% (7)**	**36.8% (7)**	19
Standard Simulator	15.8% (3)	**52.6% (10)**	31.6% (6)	19
		Others / Comments Show Responses		3

Comments
(3 comments)

We started a rewrite of the existing referee box. So far we have rewritten the GUI, included SSL-Vision support and started to design a new protocol based on protobuf that sends the whole referee box information. Still not ready, but at least something.

We do not have enough human resources to develop those systems.

I'm not quite sure what you mean by "SSL-Vision Plugins": Do you mean additions to the image processing stack, visualizations, or additional features (e.g. security / TCP)

Question 9

9. Rate the importance, to the league, of the following topics: Create Chart | Download

	Strongly Disagree	Disagree	Agree	Strongly Agree	N/A	Rating Average	Response Count
Being the best league in RoboCup	0.0% (0)	5.3% (1)	**57.9% (11)**	31.6% (6)	5.3% (1)	1.22	19
Collaboration between the participating teams	0.0% (0)	5.3% (1)	**57.9% (11)**	31.6% (6)	5.3% (1)	1.22	19
Advancing research in robotic hardware	0.0% (0)	26.3% (5)	**47.4% (9)**	21.1% (4)	5.3% (1)	0.67	19
Advancing research in multi-agent collaboration	0.0% (0)	0.0% (0)	36.8% (7)	**63.2% (12)**	0.0% (0)	1.63	19
Advancing research in robotic motion control	0.0% (0)	10.5% (2)	31.6% (6)	**52.6% (10)**	5.3% (1)	1.33	19
Researching industry relevant problems	0.0% (0)	31.6% (6)	**42.1% (8)**	10.5% (2)	15.8% (3)	0.38	19
Educating students on robotics at a hands-on competition	0.0% (0)	5.3% (1)	**47.4% (9)**	42.1% (8)	5.3% (1)	1.33	19
Educating the general public on robotics	5.3% (1)	10.5% (2)	**68.4% (13)**	10.5% (2)	5.3% (1)	0.72	19
					Other comments Show Responses		1

Comments
(1 comment)

Our team has considered many of the same goals while setting our team mission and scope, and we have decided to focus on student education and development and being a competitive team. As for the league, I think SSL serves its purpose by allowing research into the collaborative aspects of AI and student development. On such a small package, it is difficult to advance much in robotic hardware or industry problems.

Question 10

10. Please write any suggestion or comment you have to the Organizing and Technical committees of RoboCup Mexico City 2012. Download

	Response Count
Show Responses	6

Responses
(6 responses)

I think the committee is doing a great job so far and should keep up the excellent communication. This survey is a great start. We're looking forward to starting more collaboration with other teams this year, so for the OC and TC to facilitate this would be of great benefit to everyone. A few notes for Mexico: I've been told some of the vision problems

in Istanbul stemmed from not having the correct lighting. We need specific lights with a very broad colour spectrum so that the cameras can pick up a broad enough colour packet for SSL-Vision. We'd be happy to discuss more on this matter. Also, the social was a huge hit and we should definitely do this again next year!

I propose that we will decrease robot size in the near future (not 2012). * I would like some teams to join the SSL-Humanoid.

Regarding SSL-Vision, would be interesting if after the fields are calibrated, the computer could be locked to avoid people changing configuration. In the past 2 RoboCups several times the vision expert had to redo the work because between games people had changed configurarions

- precise definition of the multiple defense - precise definition of the pushing - precise definition of the touching to the goalie e.g. if a part of goalie is in outside of the defense area and opponent robot touched to the goalie, is it violation? - Use napless carpet for a field - Do not play when one team give up the game. (This year, the game was played in such case. It was a loss of tome.) - The net over the goal should be changed to a transparent one.

improve game more intelligence

In singapore competition we have some problem about registration because of our country (IRAN). Robocup is a scientific competition and should not add political issue to it. We hope that this problem didn't occur again. Thanks.