RoboCupJunior Soccer - Rubrics 2019

Soccer Technical Committee 2019:

Tairo Namura	Japan
James Riley	Australia
Mikail S. Arani	Canada
Javier E. Delgado Moreno	Mexico
Felipe Nascimento Martins	Netherlands
Marek Šuppa	Slovakia (CHAIR)

Soccer Technical Committee 2018:

Sarit Salzman	Israel
James Riley	Australia
Michael Sloan Warren	USA
Javier E. Delgado Moreno	Mexico
Felipe Nascimento Martins	Netherlands
Marek Šuppa	Slovakia (CHAIR)

These are the official Soccer rubrics for RoboCupJunior 2019. They are released by the RoboCupJunior Soccer Technical Committee. English rubrics have priority over any translations. Please note that the rubrics are public for only the second time in 2018, so all comments and suggestions are welcome. Use the forum (https://junior.forum.robocup.org/c/robocupjunior-soccer) if you want to help us to improve them for next year!

Preface:

Rubrics are used to allow teams to know what relevant aspects of robotics education the OC and approved volunteers will be examining in team interviews at RoboCupJunior Soccer. Unlike the rules, rubrics are not mandatory to follow. They are designed to be a useful information source for teams wishing to get the maximum points possible at their technical interview and to keep in mind when preparing their poster.

Note that these rubrics will be used at RoboCupJunior Soccer 2019 to evaluate your team. These rubrics are the same for all sub-leagues in Soccer.

Poster Rubric 2019 - Sydney - Soccer league

1. Description

Posters are an important part of Science, Technology, Engineering and Mathematics fields in that they are designed to share knowledge of a project or experiment on a single page (albeit a large one), rather than a multi-page document.

Posters at RoboCupJunior Soccer are designed to be a way to meet one of our primary goals: **to share with and learn from each other and grow the community's knowledge of robotics**. Each year new developments in design, construction and programming are made by teams which, when shared, help other teams in subsequent years design and build better robots, which makes for more challenging and interesting events. These new developments provide inspiration for teams to grow and develop new and innovative approaches to the league.

2. Requirements for Poster

As part of your poster you are required to include the following components:

- **Title / Identification** – team name, country, sub-league.
- **Abstract** – A concise summary of the entire project. The abstract should summarize the critical elements of the poster, but should avoid repeating what is stated elsewhere in the poster.
- **Method / Robot Production / Design** – A description of the choices made during the robots' production, including the rationale underlying those choices. Production includes the design, construction, programming, component selection, and overall process. Teams should indicate the programming language, sensors used, time and cost of development.
- **Data / Results / Discussion** - The poster has details of the team's development and testing of the robot including any relevant data and modifications made as part of the robot's creation.
- **Photos / Images** – The poster should include images and graphics representing the team's robots and to highlight the various parts of the poster. Images and graphics should be original or should be available for non-commercial reuse with modification as per the creative commons license (http://creativecommons.org/).
- All information in the poster should be in English.

No poster – *Teams without poster will get 0 points in this rubric.*

Note that the poster can be at most **36" high x 48" wide (landscape) or 91.4 cm high x 121.9 cm wide.**

3. Marking Rubric

Your team's poster will be marked by Members of the Soccer Organisational Committee or Local Committee Members and volunteers under guidance using the following rubric. You will be given a score from one to four in each of the four rubric categories, for a maximum of 20 points.

Poster Rubric 2019 - Sydney - Soccer league

Team Name / ID: _____Country: _____ Lightweight Open

Category	1	2	3	4
Abstract	*Abstract is missing, unclear or wholy incomplete (i.e omits many critical elements of the poster).*	*Abstract is somewhat incomplete (i.e. omits some critical aspects of the poster) OR repeats detailed information already in the poster.*	*Abstract clearly summarizes each critical component of the poster AND uses appropriate scientific language.*	*Rubric 3 is satisfied AND the abstract manifests a clear intent to share actionable knowledge with other teams.*
Method / Production / Design	*Very little to no information is supplied about the robots' production (i.e. design, construction, programming, component selection, and overall process)..*	*Some information is supplied about the robots' production (i.e. those listed in rubric 1) OR complete information is supplied but descriptions are not clear and concise.*	*Complete information is supplied about the robots' production . (i.e.those listed in rubric 1). AND the information is clear and concise*	*Rubric 3 is satisfied AND the poster manifests a clear intent to share all actionable knowledge of the robots' production to improve the community knowledge base and level of competition*
Data / Results / Discussion	*No data is displayed OR data analysis is not relevant to the team's project development.*	*Minor data resulting from testing is displayed no OR significant data resulting from testing is displayed but no major modifications based upon the testing are mentioned.*	*Significant data resulting from testing is displayed AND major modifications were made on the robot as a result of testing AND data and results are displayed clearly (i.e. using graphs or tables).*	*Rubric 3 is satisfied AND the poster demonstrates a clear understanding of the link between testing, evaluation and modification based upon the testing.*
Photos / Graphics	*Several photos and graphics of a poor quality (e.g., blurry or pixelated) OR are not relevant to the related section of the poster*	*Photos and graphics are relevant to the related section of the poster but some are not labelled or cited.*	*Photos and graphics are relevant to the related section of the poster AND all are of an excellent quality AND all are appropriately labelled, and cited based on the photographer/creator, or appropriately referenced if sourced online.*	*Rubric 3 is satisfied AND the overall graphic presentation is well composed and designed, in clear focus and with a consistency in colour palette/theme.*
Layout / Design	*The poster does not follow a logical layout OR contains many spelling or grammatical errors*	*The poster follows a somewhat, but not wholly, logical layout OR the poster contains a few spelling or grammatical errors.*	*The poster has a clear and logical layout (i.e.Information is easy to access for the viewer, with graphics, images and text appropriately positioned and font size consistent). Spelling and grammar are error free.*	*Rubric 3 under "Layout/ Design" AND the poster contains graphics and design that are the original work of the team AND that effectively highlight the team's creativity.*

Total Score: Judge Name:

Robot Design & Team Spirit Rubric 2019 - Sydney - Soccer league

Team Name / ID: _____ Country: _____ Lightweight Open

Presentation	**1**	**2**	**3**	**4**
Teamwork	Team demonstrates little understanding of how the work was done	Multiple members have contributed OR all team members have contributed but the distribution of work was uneven OR a team member is not respectful of another team member	All team members have contributed evenly AND all team members are respectful of the other team members	Rubric 3 is satisfied AND there is a general appreciation by all team members of their teammates' strengths and contributions
Game Strategy	The team cannot explain their game strategy OR the team cannot explain the logic used in their game strategy	The team has a basic game strategy such as get to the ball, stay in bounds and head to the opposing end AND can explain the logic used in their game strategy	The team employs a more advanced game strategy (for example, the robots can dynamically switch playing striker and goalie) AND can explain the logic used in their game strategy	Rubric 3 is satisfied AND the team can demonstrate novel strategies it uses on the playing field
Use of Sensors	Limited sensor use and simplistic behavior (robot basically just follows ball and knows the direction of the goal) OR the team cannot explain the logic and code used by their sensors	Limited sensor use with more advanced implementation (e.g., robot senses if it is out of bounds, simple localization, etc) AND the team can explain the logic and code used by their sensors	Advanced use of sensors with appropriate algorithms (e.g., localization that functions well regardless of the position of other robots) AND the team can explain the logic and code used by their sensors	Rubric 3 is satisfied AND the robot uses custom sensors or custom components thereof (for example, parabolic mirrors)
Chassis Design	Chassis was purchased off-the-shelf with minimal modifications	Chassis is not robust OR has stability problems OR is an off-the-shelf model that has been significantly modified	Chassis is robust and stable, self-designed, and self-built (i.e. significant portion of the robot is designed using a CAD software)	Rubric 3 is satisfied AND the chassis includes unique and/or novel mechanical features (i.e. as opposed to electronic features)
Problem Solving	Members do not explain problems that had to be overcome during their process	Members identify problems that they faced, but did not explain effective solutions to those problems	Members identify problems that they faced AND explained effective solutions to those problems	Rubric 3 is satisfied AND members demonstrated examples of their applying the principle that problem solving is ongoing AND can identify significant things they still need to work on

On-field

Professionalism	The majority of the team members fails to display friendly sportsmanship and cooperation with others *(e.g.*, opponents, referees, etc.)	The majority of the team members display friendly sportsmanship and cooperation with others all the time, even in negative situations.	All team members display friendly sportsmanship and cooperation with others all the time, even in negative situations	Rubric 3 is satisfied AND all team members go out of their way to improve the experience of others
Movement	Robot has difficulty moving around the field	Robot has significant difficulty staying in bounds	Robot has no significant difficulty staying in bounds	Rubric 3 is satisfied AND the robots display significant maneuverability/agility AND almost never go out of bounds
Ball Handling	Robot has difficulty locating the ball	Robot can generally maintain possession of the ball	Robot can reliably shoot or push the ball into the opponent's goal	Rubric 3 is satisfied AND the robot reliably shoots or pushes the ball into the open portion of the opponent's goal

Total Score: Judge Name