RCJ ONSTAGE ENTRY - SCORESHEETS 2024

These are the recommended OnStage Entry scoresheets for RoboCupJunior 2024. They are released by the RoboCupJunior OnStage League Committee. English rubrics have priority over any translations. Please note that score sheets are public, and all comments and suggestions will be welcome. Use the RCJ forum (https://junior.forum.robocup.org) if you want to provide feedback.

OnStage Overview

All teams are judged in the following areas: Poster, Interview, Open Technical Demonstration and OnStage Performance. Teams must highlight two of their robot(s) **features** in the work they present to the judges. Ask the following question - "What are you most proud of and what do you want to be judged on?" The features have to be of technical nature.

Teams should describe their two chosen features in the Poster. In addition, teams should demonstrate their understanding of their robots' in the Technical Interview and Open Technical Demonstration.

For clarification on a teams' features, please do not hesitate to reach out to the OnStage League committee using the RoboCupJunior Forum.

Preface

Rubrics are made for teams to know what relevant aspects will be appreciated in terms of education by the judges at RoboCupJunior OnStage 2024. They are a useful source of information for teams.

These score sheets will be used at RoboCupJunior OnStage to evaluate your team.

Official RoboCupJunior site: https://junior.robocup.org (Click OnStage tab)

Official RoboCupJunior forum: https://junior.forum.robocup.org/

OnStage Entry **Technical Interview** Score Sheet 2024

Team Name: ……………………………………...…….... **Country/Region:** ……………………

Category	Examples of how high marks may be achieved are:	Mark
Programming	**Ability to explain the program and the interactions between the hardware and software:** - Choice of programming language (age appropriate) - Difficulties with the software - Efficient and optimized programming with clear documentation and commenting with evidence of version control - Loops or/and Clauses - Reasonable usage of variables - Definition of own functions/methods	/7
(Electro-) Mechanical Systems	**Ability to explain why electromechanical design choices were made:** - Choice of materials - Design choices are made to ensure systems are reliable and durable - Sustainable design choices including the choice of materials **Explain how systems are fit for purpose - examples include:** - Complex mobility - wheels/omnidirectional/legged robots - Stable builds and design of custom components - Mechanical function - Robotic arms or claws for manipulation	/7
Sensor and Communication Systems	**Ability to explain the role of sensors and communication in the systems and how the robots interact with the stage environment:** - Robots can sense their environment and use the information to dynamically respond with an action - Usage of various sensors - Development of communication between robots **Explain how systems are fit for purpose - examples include:** - Robot-Robot interaction - Robot-Human interaction - Appropriate selection of sensors for task	/7
Innovation and Development	- Teams are able to explain developments based on past feedback and performance results - Innovative / creative feature	/4
Teamwork and Collegiality	Evidence of team collaboration, problem solving and spirit in the performance and competition.	/5
Deductions *(At discretion of judges up to -10)*	Judges believe the work was not done by team members Team members are unable to explain their technical involvement with the robot Team infringements of the 2023 Rules	
Total Score		**/30**

OnStage Entry **Technical Description Poster** Score Sheet 2024

Team Name: ……………………………...……… **Country/Region:** ……………………

Category	Examples of how high marks may be achieved are	Mark
Abstract and Performance Description	- Clear overview of the performance idea and how the chosen technology adds to the performance as described in the abstract - Describes authenticity in the project and performance development	/4
Technology and Innovation	- (Electro)mechanical, sensors, communication and software choices are clearly described - Clear definition of the two chosen features through the use of words, diagrams and images - Depth and understanding of the two chosen features and how the chosen features add value to the performance	/4
Poster design	- Poster submitted using the correct format in paper format (A1) and virtually - The Poster is easy to read and understand - The Poster has a good design that provides efficient information through a good balance of texts and images.	/2
Total Score		/10

OnStage Entry **Open Technical Demonstration** Score Sheet 2024

Team Name: …………………………………...……... **Country/Region:** ……………………

Category	Examples of how high marks may be achieved are	Mark
Robotic Demonstration and Features	**Demonstration of a fully working robotic system including the two chosen features.** - Demonstrates the overall capabilities of the robot(s), including the two chosen features - Demonstrates fully working robotic systems without costumes - Explanations how the two chosen features were selected by the team.	/4
Demonstrate capabilities	Robot capabilities demonstrated in the presentation (hardware, software, sensors, algorithms, mechanical engineering, electronics and communication).	/4
Clarity and quality	Presents a well-polished demonstration. The accompanying materials are clearly explained. Effectively communicates the technical capabilities of the robot to the audience in a concise and clear manner.	/2
Deductions:	-1 if the team has not cleared the stage after 7 minutes *If a problem is not the fault of a team no deductions will be applied*	
Total Score		**/10**

OnStage Entry **<u>Performance</u>** Score Sheet 2024

Team Name: ………………………………………… **Country/Region:** ………………………

Category	Examples of how high marks may be achieved are	Mark
Visual Impact and Quality of the Whole Performance	**The robotic performance is engaging. For example:** - The theme is clearly displayed throughout the performance. - Performance entertains and triggers positive responses from the audience. - Effective use of the performance space and set design - Robot costumes add value to the performance.	/25
Robotic Interaction and System Integration	- Risky/difficult movements are taken and compliment the theme. - Impactful and interesting interaction between robots and/or humans. - Smooth interaction between robots and humans that integrates into the performance seamlessly. - All robotic systems integrated are used extensively throughout the performance (e.g. using sensors and motor in multiple ways). - Interactive props that impact the performance in a way that is engaging and adds value.	/15
Effective implementation of features presented by the team.	**Implementation of two chosen features:** Excellent implementation and impact - features works as expected and add extensive value to the performance: | Feature 1:	/5
Feature 2:	/5		/10
Deductions: (-3 for each at discretion of judges)	-3 for each unplanned human intervention (including remote or human controlled actions) -3 for each restart -3 each 10 seconds over or under the allotted time (on stage or performance) *If a problem is not the fault of a team no deductions will be applied*	
Total Score		**/50**

Teams that infringe the rules will be warned that such infringements will not be allowed in the second performance.