RoboCupJunior Dance Interview Score Sheet 2014

Team name ..... **Secondary / Primary** **Dance / Theatre** **Judge's initials** .....

Design (8 marks)	
Robots are designed by the students: Using own design = 2; Decorated onto a basic structure = 1; Commercial robot (eg. AIBO) = 0.	/2
Gearing, linkages, pivots, motors (other non-basic features) are used in design and drive mechanisms: Team could demonstrate original, artistic, or innovative movements of their robot(s) = 3; Failed to demonstrate or simple movements = 2/1; No demonstration shown = 0. Reward dynamic more than static representations and innovative use of technology.	/3
Problems of robot balance have been addressed: What have they done to keep robot's balance? Adjusting the centre of gravity, reinforcing a part, or changing the power, etc.	/2
Robotic costumes/props/scenery are representative of the performance theme.	/1
Sub-total	**/8**
Construction (8 marks)	
Robots are constructed by the students as opposed to using standard kits: Using original parts which made by themselves =3/2; Using kit (eg. LEGO) = 1; Commercial robot (eg. AIBO) = 0.	/3
Reliable and robust construction: What have you done to prevent your robot(s) from falling over or breaking if they fall? How did you stop x from becoming loose during the performance? Have you taken risks with the construction? Reward innovation.	/2
Robotic costumes/props/scenery are innovative and well-made: Interesting/innovative use of materials. Robotic costumes/props/scenery are designed and made by the students (not "ready-made").	/3
Sub-total	**/8**
Use of electronic devices (11 marks)	
Understanding of electronics used: Understands operation of electronics (inputs, outputs, power, memory, processors, communications, sensors etc). What is the function of each board? How are the voltages regulated? How are motor speed/direction controlled (hardware)? What types of batteries are used?	/3
Design and construction of own electronics: Teams built owns board = 3; Some home built circuitry used alongside kits = 2/1; Use of kits only = 0.	/3
Innovative use of technologies to aid performance: Unusual, creative or novel uses of technology used in the robot performance. Eg. Communication between robots (using IR, Ultrasonic waves or other means) to trigger events, keeping in sync with other robots, RFID, digital camera, construction and control of non-kit servo motors/sensors, etc. Innovative use of technology clearly demonstrated = 5; Attempt to use innovative technologies demonstrated = 4/3; Demonstration of innovative technology did not fully work = 3/2; Limited or no demonstration of innovative technologies = 1/0.	/5
Sub-total	**/11**
Use of sensors (8 marks)	
Understanding of sensors used on the robot: What types of sensors are on the robot? How do they work? Why were these sensors used? How are they programmed? How did you place your sensors? Did you encounter interference when the sensors were used? Etc. No sensors used = 0	/3
More than one sensor has been equipped on a robot: Robots use multiple sensors that interact to cope with more complex situations. Single or no sensor used = 0.	/2
Effective use of sensors that aid the performance: Are sensors used to trigger next part of performance? How effective are the sensors used? Sensors must be effective in affecting the performance. Team could demonstrate sensors used = 3/2; Failed to demonstrate= 1; No demonstration shown = 0. Reward innovation.	/3
Sub-total	**/8**
Programming (10 marks)	
They can explain, describe and understand programming language(s) and environment: If I changed this command what effect would that have on the robot? What does this feature of the language do? What tool did you use for programming? How did you design this program to a robot? Etc. No program shown = 0.	/2
They are able to explain connections between the program and their performance: What does this section of program tell the robot to do? Which part of the programming corresponds to a highlight stated in the Stage Script? Does the robot use timed commands (fewer points) or sensors to activate or terminate activities? Which part of the programming is used for sensors? What do you worry will go wrong? How have you prepared for problems? Etc. No program shown = 0.	/2
Main part of the programs are created by the students as opposed to copying sample codes or open sources: All codes programmed by students themselves = 2; Some codes were copied and rewritten = 1; Codes were almost copied or combined with other programs = 0. No program for the Original dance performance shown = 0.	/2
An appropriate ingenuity to age and level of expertise is found in programming: Are there any own icons/sequences/subroutines? Are there any comments? Are all variables and constants in the program logical? Can they find a specific section of their program quickly? How did they manage revisions during debugging? Etc. No program shown = 0.	/4
Sub-total	**/10**
Evidence of authenticity (5 marks)	
Teams bring all their robots, props/scenery, poster and programs (printed or on laptop) to the technical interview plus completed "Technical Sheet" and "Stage Script".	/2
Team shared the work and collaborated as a team: How did you work as a team? Share the tasks? How did you make decisions? How many were really active in building or programming the robot? How did they solve problems as a team? Did they have sub-teams? Ask how the team has managed to complete multiple tasks. Did they have sub-teams? Did they get any help/support from adults or/and friends? If yes, ask what/how)	/3
Sub-total	**/5**

Note: Significant mentor involvement including (during the competition) will cause points reduction or being disqualified.

TOTAL SCORE /50