

RCJA OnStage Experienced Performance Score Sheet

Category	Descriptor	Score
HARDWARE	Robots complete, sound and are working for the entire performance (3)	15
	3: all robots work 2: robot has minor error 1: robot has major error 0: no performance possible	
	All robots play a role in the performance (5)	
	4-5: all robots/props have a role 2-3: some powered object has no role 1: many powered objects have no role 0: all powered objects have no role	
	Interaction between robot and other non-robot components (4)	
	3-4: multiple interactions between range of components 2: some interactions 1: limited interactions at limited points in performance 0: no interactions	
ENGINEERING	Robots demonstrate moving components fit for the performance (3)	8
	3: multiple moving components beyond a rolling base 2: at least one component beyond rolling base 1: functional rolling base 0: no functional movement	
	Robot appearance complimented the performance (3)	
	3: well-coordinated robot appearance and performance theme/concept 2: mostly coordinated appearance and attention paid to theme/concept 1: appearance and performance theme/concept loosely linked 0: no obvious link between appearance and performance	
	Evidence of working communication between robots through interaction (5)	
	5-6: multiple Interactions throughout the performance both visible and clear 3-4: several clear interactions within the performance 1-2: very few opportunities to interact within performance 0: no evidence or interactions	
INNOVATION	Robot movements demonstrate risk (6)	14
	5-6: Multiple, varying risks demonstrated throughout the performance 3-4: Several risks with some variety demonstrated within the performance 1-2: At least one risk taken by moving close to edge, risking balance etc. 0: no risks evident	
	Robots move in a synchronised/themed manner (8)	
7-8: movement of robots was purposeful, coordinated and suitable 4-6: movement of robots was coordinated and suitable 1-3: movement of robots indicated some coordination 0: no coordination evident		
CREATIVITY	The performance is stimulating and artistic (8)	23
	6-8: Engaging, purposeful, audience centred 4-5: mostly engaging, audience centred 1-3: Inconsistent, lacking purpose and focus 0: no performance values visible	
	Performers were engaged in the performance (3)	
	3: Performers integral part of performance 1-2: Performers enhanced the performance through movement 0: No humans performed during performance	
	A clear concept/theme is established (8)	
	7-8: all aspects work together towards a clear goal 4-6: most aspects work as a clear theme/concept 1-3: some evidence of a theme/concept 0: no concept/theme evident through performance	
DEDUCTIONS	Restarts (-1) (Maximum of 2 allowed)	
	Each unplanned human intervention (-1). Not applied if restart applied.	
	Robot outside stage (-1). Not applied if restart applied.	
	Exceeding allotted time: Performance ends immediately (-5)	
TOTAL	MAXIMUM SCORE = 60, MINIMUM SCORE = 0	

RCJA OnStage Experienced Interview Score Sheet

Category	Descriptor			Score	
HARDWARE	Design and construction new and unique for competition season (2)			4	
	<i>2: new and unique design and construction developed for the competition season</i>	<i>1: Some elements of design and construction newly developed, with some sourced or copied elements</i>	<i>0: no elements new or unique. copied previous models or sourced designs</i>		
	Use of moving parts not including a rolling base (2)				
	<i>2: a range of moving parts that demonstrate multiple modes of movement</i>	<i>1: some use of moving parts beyond a rolling base</i>	<i>0: No moving parts beyond a rolling base</i>		
SOFTWARE	Programming language(s) clearly demonstrate knowledge and use of accepted programming techniques and features (4)			14	
	<i>3-4: Highly developed and clearly demonstrated advanced use of complex programming techniques and features</i>	<i>1-2: some use of enhanced languages or features, techniques and/or functions</i>	<i>0: basic elements of simple programming languages only</i>		
	Advanced concepts used to improve efficiency and readability of code (4)				
	<i>3-4: advanced coding concepts relevant to language, age and level improve efficiency and readability</i>	<i>1-2: advanced coding concepts relevant to language, age and level improve efficiency or readability in some way</i>	<i>0: no evidence of any enhancement or effort used to improve readability or efficiency of code</i>		
	Sensors used to enhance interaction between robot(s) and the environment (stage, props, other robots) (4)				
	<i>3-4: multiple sensors present that are all programmed using efficient code to interact in multiple ways and at multiple times throughout</i>	<i>1-2: at least one sensor programmed and used in a purposeful manner</i>	<i>0: no use of program code to enable any sensors</i>		
	Evidence of messaging between robot and other elements (2)				
<i>2: purposeful programmed messaging between robot and other robots, props or stage element</i>	<i>1: some evidence of a programmed message between robot and another robot or prop or stage element</i>	<i>0: no programmed messaging evident</i>			
ENGINEERING	Stable build with evidence of bracing or stabilisation techniques (2)			6	
	<i>2: robots are stable, well balanced and braced</i>	<i>1: robots have some stability through good design and construction</i>	<i>0: robots are unstable, or lack any designed stabilisation</i>		
	Technically sophisticated concept (4)				
	<i>3-4: overall theme/concept displays multiple and varied technical components linked together to create a coherent performance</i>	<i>1-2: overall theme/concept has more than one technical component that contributes to the performance</i>	<i>0: performance is simple, without any technical complexity beyond a rolling base moving or a motor turning</i>		
PRESENTATION	Students can clearly explain how their robot(s) work (3)			6	
	<i>3: team members fully understand and can explain all aspects of their robots, programming and their performance</i>	<i>2: team members understand and can explain most aspects of their robots, programming and performance</i>	<i>1: team members can explain few aspects of their robots, programming or performance</i>		<i>0: students cannot explain how their robots or programming work</i>
	All team members involved throughout the interview (3)				
	<i>3: all and multiple team members have made a balanced contribution to interview answers</i>	<i>2: multiple team members can demonstrate evidence of their contribution to interview materials</i>	<i>1: evidence of contributions to interview or materials by more than one person</i>	<i>0: one team member only contributes to interview and interview materials</i>	
TECHNICAL DESCRIPTION PAPER	Demonstrates that the work on display is authentic (4)			10	
	Hardware development process clearly indicated (2)				
	Performance concept development clearly indicated (2)				
	Software development process clearly indicated (2)				
TOTAL				/40	