RCAP CoSpace Humanoid OnStage Judging Overview (U19)

All teams are judged in the following areas:

- Technical Video – 20%,
- Technical Interview – 30%
- OnStage Performance – 50%

RCAP CoSpace Humanoid OnStage (U19) 2026

Technical Video Scoresheet (20%)

Country/Region: .....School: .....Team: .....

Category	**Assessment Criteria**	Points
1. AI Tool Methodology	○ Explanation of how **AI tools** (e.g., Gemini, ChatGPT) were deployed for scripts, 3D assets, and music. Focus on the logic of human-AI collaboration.	/30
2. Humanoid & Robot Implementation	○ Technical demonstration of physical/virtual robots **without costumes**. Includes **gait tuning**, autonomous control logic, and sensor integration.	/25
3. Hybrid Interaction	○ Demonstration of wireless communication and autonomous interaction between the virtual AI environment and the physical/virtual robots.	/15
4. Problem Solving	○ Clear description of technical hurdles (e.g., gait stability or communication lag) and the original logic used to solve them.	/15
5. Video Production & Clarity	○ The video is technically engaging, well-organized, and presented in clear **English** (voice-over, text, and subtitles).	/15
Total Score		/100

RCAP CoSpace Humanoid OnStage (U19) 2026

Technical Interview (30%)

Country/Region: .....School: .....Team: .....

Category	**Assessment Criteria**	Mark
1. AI Tool Methodology	○ Deep-dive explanation of prompt engineering, iterative refinement of AI assets, and the methodology of using AI as a "creative partner"	/30
2. Humanoid Implementation	○ Technical understanding of humanoid robotics, including DOF management, gait tuning, and autonomous stability control	/30
3. Hybrid Interaction	○ Live demonstration of complex, autonomous wireless communication (Bluetooth/Zigbee) between the physical robots and the virtual AI environment	/20
4. Problem Solving	○ Ability to describe sophisticated technical hurdles and the logical, engineering-based steps taken to resolve them	/20
Bonus: Platform Evolution	○ **Additional Points:** Constructive, technically feasible proposal for an innovative enhancement to the CoSpace platform. (No points deducted if missing).	/10
Deduction: Authenticity	○ **Penalty:** Applied if judges believe adults or mentors were involved in mending, building, or programming the robots	/ -20
Total Score		/100

RCAP CoSpace Humanoid OnStage (U19) 2026

Stage Performance (50%)

Country/Region: .....School: .....Team: .....

Category	**Assessment Criteria**	Mark
1. Narrative & Entertainment Value	**Theme & Story:** ○ A unique and original story developed with AI (LLM) scripting. Impact: Routine is engaging, professional, and triggers an emotional response from the audience. ○ Costumes: Aesthetic value of robot/human costumes and their fit to the theme	/15
2. Hybrid World Interaction	**System Integration:** ○ Seamless wireless communication (Bluetooth/Zigbee) between real robots and the virtual environment. ○ Autonomous Reaction: Virtual entities and real robots/props react to one another meaningfully without human intervention	/15
3. Virtual World	○ Virtual 3D Design & AI Assets: Quality of AI-generated 3D objects, textures, and atmospheric effects (smoke, sparkles). ○ Cinematography: Creative use of the virtual camera to enhance the story for the audience. ○ Multimedia: Integration of original AI-generated music and soundscapes	/10
4. Real World	○ Technical Features: Execution of chosen robotic features – Feature 1: Autonomous Logic & Humanoid Gait Tuning – Feature 2: Robot/Robot or Robot/Props Interaction ○ Construction: Solid build quality, smooth autonomous movement, and effective stage arrangement. ○ Interactive Props: Innovative use of physical props that interact with robots	/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