GAR 2026 International Online Invention Challenge Contest

RULE

I. Background

To promote the deep integration of STEAM education with artificial intelligence technology and stimulate the innovative potential of young people worldwide in the field of robotics engineering, the GARS Organizing Committee has launched an international online invention challenge centered on the NASHENBOT robot kit. This competition focuses on cultivating three-dimensional abilities: "intelligent hardware construction + programming innovation + cross-cultural presentation." Through two weeks of intensive project practice, it aims to cultivate a reserve of technological innovation talents with an international perspective, while simultaneously building a three-in-one competition paradigm of "technology foundation—process management—results dissemination."

II. Theme Introduction

Humanoid robots, as a cutting-edge direction in the development of human robotics, are profoundly reshaping the human-robot collaboration paradigm with their dynamic balance, multimodal perception, and autonomous decision-making capabilities. This competition, themed "**Building Block Humanoid Robot**," relies on the **AISTEAM 101S** technical standard, unifying hardware interfaces, communication protocols, simulation environments, and the AIcode programming platform. This allows participants to unleash their creativity and collaborate as a team under equal conditions to create a humanoid robot application prototype that reflects their own and their country's unique characteristics. Through project reports, video submissions, and online interactive demonstrations, the competition comprehensively evaluates the engineering feasibility, real-time response capabilities, and cross-cultural expressiveness of the solutions.

III. Supporting Organizations

1. **Organizer:** Global Artificial Intelligence Robot Society (GARS).
2. **Co-organizers:** GAR National Representative, GAR Premier Partner, GAR Certified Partner.
3. **Technology Platform:** Nashenbot.

IV. Competition Guidelines

1. **National Recruitment:** This competition is limited to 5 countries, with a maximum

of 2 teams per country.

2. **Team Composition:** Each team consists of 2-3 students (aged 10-18) + 1 instructor.

3. **Competition Categories:** Primary school group, junior middle school group, senior middle school group (no categories in this competition).

4. **Judging Mechanism:** Each participating country will send 1 judge, and the GARS Organizing Committee will send 1 chair judge to form the judging panel. A "nationality avoidance" system will be implemented, meaning the judge from the participating team's country will not participate in the team's scoring. Each work will be scored independently by the remaining 5 judges, and the final score will be the average of the 5 judges' scores. This scoring mechanism will be used for both overall and individual awards.

5. **Competition Equipment:** The work must be built based on the AISTEAM 101S standard kit, and each team may use a maximum of 2 kits (including 2 kits). See Attachment 1: AISTEAM 101S Part List.

6. **Programming Platform:** AIcode software.

7. **Competition Format**

(1) **Offline Creation:** After successful registration, participants must complete the project creation within the specified time, including all aspects such as project setup, programming, video production, and presentation preparation. They must then submit a project report and upload the video to YouTube for demonstration.

(2) **Online Demonstration:** Participating teams must log in to the online meeting room during the designated time period for an online demonstration. Each team's demonstration time is 5 minutes, followed by 5 minutes for judges to ask questions and for participants to answer, for a total of no more than 10 minutes.

8. **Project Report**

(1) **Report Format:** Any format is acceptable; participants may choose the format that best showcases the highlights of their work, such as Word, PDF, or PPT.

(2) **Report Language:** The entire report must be written in English.

(3) **Report Content:** The report must fully document the entire creation process of the project, including but not limited to the following: creative ideas and sources of inspiration; team division of labor and collaboration process; a list of parts used to build the robot (a template can be downloaded from Attachment 2); programming logic and technical implementation path; demonstration of the project's functions; description of application scenarios; innovative points, etc.

(4) **Image Requirements:** The report must include clear photos of the project from multiple angles, including front, side, back, and close-up details, comprehensively showcasing the structural details of the project.

(5) **Originality:** The report content must be original to the participating team and must not be plagiarized or infringe upon the intellectual property rights of others.

(6) **Submission Method:** Package the project report into a compressed file and send it to the email address: gar@nashenbot.com. Please indicate "GAR 2026 + Country + Team Name + Project Report" in the email subject.

9. Video

(1) **Video Length:** No more than 10 minutes.

(2) **Video Quality:** Resolution of 1080P (1920×1080) or higher, frame rate of no less than 30fps, MP4 format.

(3) **Video Content:** Must present the creation process, functional demonstration, and innovative highlights of the work.

(4) **Video Template:** The video border template provided by GAR (which can be downloaded in Attachment 3) must be used to ensure a consistent and standardized visual presentation.

(5) **Subtitle Requirements:** The video must have English subtitles throughout.

(6) **Audio Requirements:** Must ensure clear sound, accurate terminology, and fluent expression.

(7) **End Credits:** Fully showcase the team members.

(8) **Production Requirements:** The video must be completed independently by the participating team and must not include any unauthorized materials.

(9) **Information Verification:** Technical parameters and parts used in the video must be consistent with the submitted project report.

(10) **Upload Platform:** The video must be uploaded to YouTube for display.

(11) **Submission Method:** Send the video link to the email address: gar@nashenbot.com. Please indicate "GAR 2026 + Country + Team Name + Video" in the email subject.

10. Other Elements (Not Mandatory)

(1) **Team Image Design:** Participating teams may design their own team logo, slogan, etc., to showcase their team characteristics.

(2) **Decorative Materials:** Non-building blocks and non-electronic decorative materials (such as fabric, paper, stickers, etc.) can be used to enhance the visual

effect.

(3) Visual Presentation: Diverse visual expressions can be used through posters, display boards, animated short films, interactive web pages, etc., to enhance the appeal of the work.

V. Competition Stages

1. Registration: Organize student and judge registration (registration form can be downloaded from Attachment 4).

2. Competition Opening (Online): Announce the competition and explain the rules, publish the list of participating teams and judges, announce the competition schedule, and have representatives of the participants and judges take an oath.

3. Project Creation and Submission (2 weeks): Participating teams will create their projects, write project reports, shoot and produce videos, and complete the following two tasks before the latest submission date:

(1) Package the project report into a compressed file and send it to gar@nashenbot.com (email subject: "GAR 2026 + Country + Team Name + Project Report").

(2) Upload the project video to YouTube and send the video link to gar@nashenbot.com (email subject: "GAR 2026 + Country + Team Name + Video").

4. Online Presentation and Judging: Participating teams will conduct online presentations and Q&A sessions (5 minutes for presentation and 5 minutes for Q&A per team), with judges scoring live. Popularity points will be calculated based on YouTube views the day before the online showcase.

5. Closing Ceremony and Awards Ceremony: Held on the same day as the online showcase judging, the competition results will be announced and awards will be presented.

Note: Specific dates for each stage will be announced separately by the GARS Organizing Committee. Participating teams are advised to pay close attention to official announcements.

VI. Scoring Criteria

The competition uses a 100-point scoring system. Judges will comprehensively evaluate entries based on five dimensions: creativity, technique, teamwork, presentation, and popularity.

1. Creativity Score (15 points): This focuses on assessing the relevance of the entry to the competition theme, the uniqueness and appeal of the idea, and whether the entry

has practical application value and social significance.

2. **Technique Score (20 points):** This focuses on assessing the clarity of the parts list and hardware compliance, the stability of the structure and the normal operation of the program, and the completeness and quality of the project report.

3. **Teamwork Score (15 points):** This focuses on assessing the clarity of team member roles and collaborative efficiency, the richness of the team presentation (e.g., team logo, project poster), the effectiveness of mentor guidance, and the team's synergy.

4. **Presentation Score (40 points):** This focuses on assessing the completeness and fluency of the online presentation, the logical clarity and accuracy of the answers, the team's synergy during the presentation and Q&A sessions, and the fluency of English expression and cross-cultural communication skills.

5. **Popularity Score (10 points):** Based on the number of views of the submitted video on YouTube.

6. **Deductions:** Strict verification of the matching between the participant's parts list and the AISTEAM 101S kit. Excessive use will result in a deduction of 1-5 points, with 1 point deducted for each extra block, up to a maximum of 5 points. If more than 5 extra blocks, or more than 1 extra electronic component, or a falsified parts list is submitted, the participant will be disqualified.

7. **Scoring Method Explanation**

(1) **Pre-score:** Creativity, technique, and teamwork scores will be given by judges based on the submitted project report and video before the online presentation.

(2) **On-site Score:** The presentation score will be given by judges based on the demonstration and Q&A session during the online presentation.

(3) **Popularity Score:** Based on the number of YouTube views the day before the online presentation.

(4) **Final Score:** The sum of the scores across the five dimensions. Any deductions will be applied to this sum. For detailed scoring rules, please refer to the attached table at the end of this document: Scoring Table.

VII. Awards

1. Overall Awards

(1) First Place, Second Place, Third Place;

(2) First Prize, Second Prize, Third Prize.

Note: First Place, Second Place, and Third Place are awarded to the top three teams in total score. The First Place will also receive a prize. First Prize, Second Prize, and Third

Prize will be awarded according to the total score ranking, with a prize ratio of 3:4:3. Certificates will be awarded for all awards.

2. Individual Awards

(1) Best Creativity Award (highest Creativity Score);

(2) Best Technique Award (highest Technique Score);

(3) Best Team Award (highest Teamwork Score);

(4) Best Presentation Award (highest Presentation Score);

(5) Most Popular Award (highest Popularity Score).

Note: Individual awards are determined based on the highest score across all evaluation dimensions. Each team may receive multiple awards, and certificates will be awarded for each award. In case of a tie in popularity scores, the team with the highest actual YouTube views will win.

VIII. Project Showcase

1. Official Website Showcase: Outstanding projects will be featured on the GAR official website, showcasing the innovative achievements of participating teams to a global audience.

2. Social Media Showcase: Outstanding projects will be promoted and disseminated on GAR's official social media platforms (such as Facebook, LinkedIn, and Instagram).

3. Offline Exhibitions and Exchanges: Outstanding projects will have the opportunity to be exhibited at subsequent GAR offline events; outstanding teams will also be invited to attend the opening ceremony of the next GAR International Online Invention Challenge Contest, where they can share their creative experiences and competition insights.

IX. Registration and Inquiry

1. Registration Deadline: March 31, 2026.

2. Registration Method: Participating teams should register with their authorized GAR representatives in their respective countries, including: GAR National Representative, GAR Premier Partner, and GAR Certified Partner.

3. Contact Information:

(1) Email: gar@nashenbot.com;

(2) Official Social Media: Website, Facebook, YouTube, LinkedIn.

4. Event Information Release: Event-related notices will be released through the GAR website and official social media platforms. Please pay close attention.

X. Other Matters

1. The final interpretation of these rules rests with the GARS Organizing Committee.
2. Any matters not covered herein or any temporary adjustments will be announced separately through the GARS official website and official social media platforms. Participating teams are requested to pay close attention.
3. Entries must be original and must not infringe upon any third party's intellectual property rights. If plagiarism, infringement, or other violations of relevant laws and regulations are discovered, the organizing committee has the right to disqualify the participant and pursue corresponding responsibilities.

GAR 2026 International Online Invention Challenge Contest Scoring Table			
No.		Country/Region	
Team Name			

Scoring Dimensions		Point	Score	Individual Score
Creativity Score (15 points)	The work fits the theme of the "Building Block Humanoid Robot" competition.	5		
	The concept is novel and engaging, with a unique design.	5		
	The work has practical application value and social significance.	5		
Technique Score (20 points)	The parts list is clear, and the hardware meets standards and does not exceed the allowed number of parts.	5		
	The work has a stable structure and the program runs normally.	10		
	The project report is complete and of high quality.	5		
Teamwork Score (15 points)	Team members have clear division of labor and high collaboration efficiency.	5		
	The team's presentation is rich (e.g., team logo, slogan, project poster).	5		
	The instructor's guidance was effective, and the team cooperated well.	5		
Presentation Score (40 points):	The online presentation was complete and smooth.	10		
	The answers to questions were logically clear and accurately expressed.	10		
	The team cooperated seamlessly during the demonstration and Q&A sessions.	10		
	The team speaks fluent English and possesses cross-cultural communication skills.	10		

Popularity Score (10 points)	YouTube video views: 2000+ (10 points); 1000-1999 (7.5 points); 0-999 (5 points).	10		

Deductions: Strict verification of the matching between the participant's parts list and the AISTEAM 101S kit. Excessive use will result in a deduction of 1-5 points, with 1 point deducted for each extra block, up to a maximum of 5 points. If more than 5 extra blocks, or more than 1 extra electronic component, or a falsified parts list is submitted, the participant will be disqualified.

Item	Point	Actual Score
Creativity Score	15	
Technique Score	20	
Teamwork Score	15	
Presentation Score	40	
Popularity Score	10	
Deductions	(Minus Points)	
Total Score	100	

Judges: ---------- Contestants: ----------