

GAR 2026 International Online Invention Challenge Contest

Rules and Guidelines

I. Background

To promote the deep integration of STEAM education with artificial intelligence technology and stimulate the innovative potential of global youth 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 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 the cutting edge of current human-robot development, are reshaping the human-robot collaboration paradigm with their dynamic balance, multimodal perception, and autonomous decision-making capabilities. This competition, themed "**Block Humanoid Robot**," relies on the Nashenbot robot kit technical standards, unifying hardware interfaces and providing programming platforms adapted to different groups. This allows participants to unleash their creativity and teamwork under equal conditions, creating diverse humanoid robot application prototypes. Participants must comprehensively evaluate the engineering feasibility, real-time response capabilities, and cross-cultural expression of their projects through project reports, videos, and online demonstrations.

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. **Team Composition:** Each team consists of 2-3 students + 1 instructor.
2. **Competition Categories:** Primary school group, junior middle school group, senior middle school group.
3. **Competition Equipment:**
 - (1) Primary School Group: MPBOT S1 or MPBOT S2 (maximum 2 kits, no model distinction).
 - (2) Junior Middle School Group: AISTEAM 101S or AISTEAM 205S (maximum 2 kits, no model distinction).

(3) Senior Middle School Group: AISTEAM 101S + AI Camera or AISTEAM 205S (maximum 2 kits, no model distinction).

4. Programming Platform: Microbrain (Primary School Group); AICode or MakeCode (Junior and Senior Middle School Groups).

5. Competition Format

(1) Offline Creation: After successful registration, participants must complete the project creation within the specified time, including robot building, programming, project report writing, and video production, and submit the project report and video before the deadline.

(2) Online Demonstration: Participating teams must log in to the online meeting room during the designated time period for online demonstration. Each team will have 5 minutes to present, followed by 5 minutes for judges to provide feedback and ask questions, with the team members answering. The total time will not exceed 10 minutes.

6. Project Report

(1) Report Format: The project report must be prepared in PPT and submitted as PDF.

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

(3) Report Content: The report must fully document the entire project creation process.

The following content must be included:

- ① Title Page: Project name, team name, member names, instructor name;
- ② Background and Inspiration Page: Problems discovered, their importance, and sources of inspiration;
- ③ Team Collaboration Page: Team division of labor and collaboration process;
- ④ Project Building Page: Key building steps presented in image format;
- ⑤ Programming Logic Page: Programming process shown in screenshots or photos;
- ⑥ Functions and Applications Page: How the robot is used and application scenarios;
- ⑦ Innovation Points: List at least three innovative points of the designed robot;
- ⑧ Robot Images: Multiple-angle photos of the robot (front, back, side, and close-up);
- ⑨ Summary and Outlook: Project summary and future improvement directions;
- ⑩ Parts List: List of electronic parts ([template in attachment 1](#)). There is no limit to the number of building blocks; Micro:bit can be used.

The following content is optional (not mandatory):

- ① Challenges and Solutions: Problems and challenges encountered during the production process and how they were solved;
- ② Team Logo and Slogan: Team logo, slogan, and other materials representing the team;
- ③ Posters or Visual Displays: Posters or other visual display materials.

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

(5) Submission Method: Please send the project report to gar@nashenbot.com before September 28, 2026. The email subject should be in the format of "2nd GAR Invention Contest + Team Name + Project Report".

7. Video

(1) Video Length: No more than 5 minutes.

(2) Video Content: Must present the project's creation process and functional demonstration.

The following content must be included:

- ① Background Introduction: Explain the problem discovered and its importance;
- ② Solution: Introduce your robot and how it solves the problem;
- ③ Building Process: Demonstrate the key building steps of the robot;
- ④ Programming Logic: How the programming drives the robot to move and perform tasks;
- ⑤ Robot Operation: Demonstrate the process of the robot completing tasks and solving problems;
- ⑥ Team Introduction: Each member should briefly appear and introduce their role;
- ⑦ Project Summary: Briefly summarize the project's achievements.

The following content is optional (not mandatory):

- ① Extended Applications: Demonstrate more practical application scenarios of the robot;
 - ② Creative Elements: Team logo, posters, or other visual materials;
 - ③ Behind-the-Scenes: Record exciting moments of teamwork.
- (3) Technical Requirements:
- ① Video Format: 1080P, 30fps, MP4 format;
 - ② Video Border: The official GAR video border template ([Attachment 2](#)) must be used;
 - ③ Subtitle Requirements: The video must have English subtitles throughout;
 - ④ Audio Requirements: Clear sound, accurate terminology, and fluent expression;
 - ⑤ Information Verification: The electronic components used in the video must be consistent with the submitted project report.
- (4) Originality: The video content must be original to the participating team and must not be plagiarized or infringe on the intellectual property rights of others.
- (5) Submission Method: Please send the video file to gar@nashenbot.com before September 28, 2026. The email subject should be in the format of "2nd GAR Invention Contest + Team Name + Video". The video will be uploaded by GAR to the official YouTube channel (GAR-X Platform) for view counting.

8. Online Demonstration

- (1) Demonstration Language: English is required throughout the demonstration.
- (2) Demonstration Time: Each team will have 5 minutes for the demonstration and 5 minutes for Q&A, for a total of no more than 10 minutes. The online demonstration will be held on October 17, 2026. Specific times will be announced separately.
- (3) Demonstration Flow:
 - ① Team Introduction: Team members will introduce themselves and explain their roles;
 - ② Project Introduction: Briefly introduce the project background and the problems to be solved;
 - ③ Project Demonstration: Demonstrate the robot's operation and problem-solving process on-site.
- (4) Technical Requirements:
 - ① Network Environment: A stable network connection is required;
 - ② Equipment Requirements: Ensure the camera and microphone are functioning properly;
 - ③ Robot Status: Ensure the robot is operating normally.

V. Competition Stages

1. Registration and Preparation: Participating teams and judges must complete registration by August 30, 2026. Participating teams must submit a registration form ([attachment 3](#)) and a participation commitment letter ([attachment 4](#)). Both are required for successful registration. Judges only need to submit the registration form.

2. Competition Opening Ceremony: An online opening ceremony will be held on September 4, 2026, to announce the competition and explain the rules, and to publish the list of participating teams and judges.

3. Project Creation and Submission: Participating teams must send their project report and video to gar@nashenbot.com by September 28, 2026. Videos will be uploaded to the official GAR YouTube platform by GARS, with view counts up to October 8, 2026. Official YouTube channel: www.youtube.com/@GAR-xplatform.

4. Online Demonstration: Held on October 17, 2026. Judges will score based on the live demonstration and Q&A session.

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

Note: Specific timelines 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 total score is 110 points, calculated by adding creativity, technique, teamwork, presentation, popularity, and bonus scores, then deducting points for any deductions.

1. Creativity Score (15 points): This focuses on assessing the relevance of the work to the competition theme, the uniqueness and appeal of the idea, and whether the work 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, 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 demonstration, the logical clarity and accuracy of the answers, the team's synergy during the demonstration 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 within the specified period.

6. Bonus Score (10 points): Used to encourage teams to participate fully and consistently in accordance with the regulations.

(1) Three-person teams: 10 bonus points for all participants. 5 points deducted for one withdrawal; disqualification for two withdrawals. No points deducted for one withdrawal due to force majeure, provided with an explanation and approved by the organizing committee.

(2) Two-person teams: 10 bonus points for all participants. Disqualification for one withdrawal.

(3) Once team members are confirmed, they cannot be changed without authorization. In case of special circumstances, the organizing committee must be informed in advance and approval obtained.

7. Deductions: 1 point will be deducted for each electronic submission exceeding the limit.

8. Scoring Method

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

(2) On-site Score: Presentation score will be given by judges based on the online demonstration and Q&A performance.

(3) Popularity Score: Based on YouTube video views, counted until October 8, 2026.

(4) Bonus Score: Based on the team's completion of the competition.

(5) Final Score: Average of creativity, technique, teamwork, and presentation scores, plus popularity and bonus scores, minus deductions. See scoring sheet at end for details.

VII. Awards

1. Overall Awards

- (1) First Place (1st place): Medal, Certificate, Prize;
- (2) Second Place (2nd place): Medal, Certificate;
- (3) Third Place (3rd place): Medal, Certificate;
- (4) First Prize (Top 30%): Medal, Certificate;
- (5) Second Prize (Participants ranked 31%-70%): Medal, Certificate;
- (6) Third Prize (Participants ranked 71%-100%): Medal, Certificate.

Note: The above awards are awarded separately for primary school, junior middle school, and senior middle school groups. First, Second and Third Prizes are conferred according to rank, beginning from 4th place onwards.

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 in each evaluation dimension, and are awarded separately for each group. Each team may receive multiple awards, and certificates will be issued for each award. In case of a tie in popularity scores, the team with the highest actual YouTube views will win.

3. Excellent Coach Award: Awarded to the coach of the first-place team in each group, and a certificate will be issued.

4. Special Awards: This will be set separately depending on the actual scale of the competition; specific awards will be announced on-site.

VIII. Project Showcase

1. Official Website Showcase: Outstanding projects will be showcased on the GAR official website, presenting the innovative achievements of participating teams to a global audience ([click to view the first GAR Invention Contest project showcase](#)).
2. Social Media Showcase: Outstanding projects will be promoted and disseminated on GAR's official social media platforms (such as Facebook, LinkedIn, etc.).
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 participate in the opening ceremony of the next GAR International Online Invention Challenge, sharing their creative experiences and competition insights.

IX. Registration and Inquiry

1. Registration Deadline: August 30, 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, Instagram.
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. Projects 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 Sheet

No.		Team		Country	
Contestants					

Scoring Dimensions		Point	Score	Subtotal
Creativity Score (15 points)	The work fits the "Block Humanoid Robot" theme.	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 with cross-cultural communication skills.	10		
Popularity Score (10 points)	YouTube video views: 1000+ (10 points); 900-999 (9.5 points); 800-899 (9 points); 700-799 (8.5 points); 600-699 (8 points); 500-599 (7.5 points); 400-499 (7 points); 300-399 (6.5 points); 0-299 (5 points).	10		
Bonus Score (10 points)	Team size must be at least 2. 3 members: 10 points if complete (-5 if 1 withdraws). 2 members: 10 points if complete (1 withdraws = disqualification).	10		
Deductions	1 point per extra electronic component.			

Item	Point	Actual Score
Creativity Score	15	
Technique Score	20	
Teamwork Score	15	
Presentation Score	40	
Popularity Score	10	
Bonus Score	10	
Deductions	(Minus Points)	
Total Score	110	

Judge's Signature: _____ **Contestants' Signatures:** _____