



KOBOCON
MALAYSIA
2019

“Satu Langkah, Seribu Lonjakan”

TECHNICAL BRIEFING #2

DEPOSIT RETURN ACCOUNT DETAILS

HOW TO UPDATE?

- Update information of deposit return account details through the website / email.

VIDEO CHECK



VIDEO CHECK ON MECHANISMS

- Every teams has to submit a video on the final MR2 walking mechanism and MR1 throwing mechanism.
- Important to avoid disqualification during the competition day.
- Deadline: 31 March 2019



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ADDITIONAL CERTIFICATES FOR PARTICIPANTS OF ROBOCON MALAYSIA 2019

ADDITIONAL CERTIFICATES

- Applied through Formal Letter to ROBOCON Malaysia 2019 Director from the IPTA signed by the Dean (or higher) listing all the additional members for the IPTA.
- Charges per certificated will be imposed.



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TECHNICAL REPORT FOR ROBOCON MALAYSIA 2019

SUBMISSION

Deadline

- 31th March 2019 by 12am

Where to submit

- Submission on website (will inform once submission link is open)

Final submission

- We will inform if correction is required

Template provided in .docx

FAILURE TO SUBMIT

- Jeopardize your chances of winning
 - The technical report will be part of the judging criteria
- Winner will not receive the award and certificate
- Deposit will not be returned

GUIDELINES

- Must be written in English language.
- Must follow the provided technical report template.
- **MUST** be minimum 5 to maximum 10 pages.

CONTENTS

- The chapters MUST be divided as follows,

1.0 Introduction

2.0 Detailed design

2.1 Mechanical design

- Authors may discussed about locomotion, arms and legs extremities, actuators with its specification and design specifications (dimensions, mass, payload capacity, DOF, etc.).

CONTENTS (CONT..)

2.2 Electronic design

- Distribution of sensors and architecture of the processing units within the robots

2.3 Software design

- Provide flowchart of the written program/code

3.0 Presentation of Data/Simulation/Testing

4.0 Conclusions, Limitations and Recommendations

5.0 Acknowledgments

6.0 References



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ROBOCON MALAYSIA 2019 SOCIAL MEDIA CONTEST



#ROBOCON2019MOMENTS

- 1st Feb – 31st March 2019
- Be an inspiration to others with #MyRobocon2019Moments Photo Contest. Snap and share photo during the robot design and construction process to WIN a Mystery Prize!
- The next time you upload your #MyRobocon2019Moments, you or your team picture might just be selected and featured on Robocon Malaysia 2019 Facebook page. Now that's something worth to share about!
- **Winners Announcements:**
 - 1st Winner (1st- 14th Feb)
 - 2nd Winner (15th – 28th Feb)
 - 3rd Winner (1st – 14th March)
 - 4th Winner (15th – 31st March)



HOW TO JOIN?

- Step 1
 - Express your robot #MyRobocon2019Moments by taking a photo in mobile horizontal (landscape) format during the robot development process.
- Step 2
 - Upload your photo onto Facebook with the two important hashtags: (#MyRobocon2019Moments #RoboconMalaysia). Make sure your post is set to “PUBLIC” so that we can view it.



TERMS & CONDITIONS

1. The Contest will run for 59 days, starting from 1 February 2019, 11:00:00 to 31 March 2019, 23:59:59 following (UTC+08:00) Kuala Lumpur, Malaysia time zone (“Contest Period”).
2. Photo posting outside the Contest Period are invalid and will not be entertained.
3. Participants are allowed to submit as many entries as they like. Each Participant will only win ONCE throughout the Contest Period.
4. Entries with incomplete hashtag will be disqualified from the Contest.



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LATEST FAQ OF ROBOCON MALAYSIA 2019

No	Question	Answer
1	Instead of passing the Gerege MR1 to MR2 can we throw it or drop it?	Throwing the Gerege is prohibited. MR1 robot must hand over the Gerege to MR2. When passing on the Gerege, there must be a that both robots are in contact with Gerege at the same time. (Rule
2	What is the limit on the number teams in Robocon Malaysia How many teams will there be group in the Grouping round?	The maximum number of teams and the number of teams per be announced later.
3	Will the test field be provided earlier?	The game field will be constructed a few days before the Test Run During the Test Run day, each team will be given 15 minutes to robot on the actual game field.
4	Can we construct a rack to place Shagai in the Khagai Area and weight it as part of the robot?	It is not allowed to place the Shagaion a rack in the Khagai Area weight the rack as part of the robot. Only the Shagais can be the game field (Rule 1.3.3) and each robot cannot be split into units (Rule 4.2).
5	Can a player enter the field to activate MR2 to start climbing?	It is not allowed for a player to enter the field to activate MR2 to climbing. A player has to give a signal to the robot from outside Signal to start climbing the Mountain can be given by a team without any physical contact or additional signal transmitter (Rule 1.8.2).
6	Can MR1 carry more than one Shagai?	MR1 can hold and throw only one Shagai at a time. (Rule 1.7.3)
7	Can MR1 put multiple Shagais in the Throwing Zone?	MR1 is not allowed to place multiple Shagai in the Throwing Zone.
8	Can MR1 pick up a Shagai (that fallen) from Throwing zone?	All of MR1's contact surfaces must be within the Khangai Area picking up a Shagai (Rule 1.7.1)
9	Can MR1 and MR2 move when passing the Gerege?	MR1 and MR2 can move during the passing of Gerege. However, MR2 must be in the Gobi Urtuu including its space above until the delivery is completed.
10	Can MR1 push the Shagai from below and touch the field.	Any throwing mechanism that does not damage the Shagai and the is allowed.

No	Question	Answer
11	Will Robocon Malaysia 2019 FAQ follow Mongolia FAQ?	RoboconMalaysia 2019 has its own Rulebook and FAQ. FAQ will be updated according to arising matters by Malaysian participants.
12	What is the starting height of MR2?	MR2 must have the dimension of no less than 400 mm width, length, and height. It may not exceed 800 mm 1000 mm length and 800 mm heightduring the 4.12.1)
13	Is 15 minutes of Test Run is for testing on sides (Red and Blue) of the field?	Yes. It is up to the team if they want to test their robots both sides of the filed.
14	When MR1 is at the Forest should it follow line?	MR1 has to travel through the Forest according to the indicated by the white lines (Rule 1.4.2). However, MR1 not have to travel exactly on the white lines.
15	When is the refund date for the fees?	The commitment fees will be refunded by 15th of April
16	For MR1, can we use Xbee?	Only Wi-fi and Bluetooth wireless controllers are allowed operate MR1. (Rule 4.11.5)
17	Is the Gerege for Robocon Malaysia 2019 same as the International Robocon Gerege?	The Gerege for Robocon Malaysia 2019 will be slightly different from the International Robocon Gerege. Please to appendix 10 of the Robocon Malaysia 2019 rulebook. sample Gerege will be given to all the registered team.
18	Does the MR2 have to touch/step on the dune when crossing it?	It is not necessary for MR2 to touch/step on the Sand when crossing it.
19	Is it OK for MR2 to be crawling like a 4 spider?	It is OK as long as it meets the specification of MR2 4.12.
20	Can the Shagaibe be placed anywhere?	The three Shagais must be placed anywhere in the Area during the setting up time. (Rule 1.3.3)
21	Can we lean the Shagai against the fence?	Yes as long as all of the Shagais are inside of the Area including space above.

No	Question	Answer
22	Can we have 2 legs controlled by 1 motor for MR2?	Yes as long as the robot meets the specification of MR2 in Rule 4.12.
23	Is Gerege allowed to shake, rotate or vibrate but still within the 45 degrees of the original position?	Yes. MR1 is allowed to tilt the Gerege in the range up to 45° (Rule 1.3.5.2) and there is no restriction on the angle of Gerege when MR2 carries the Gerege.
23	MR2 does it have to look like a horse?	MR2 does not have to look like a horse.
24	Is jumping/hopping/galloping of the MR2 is allowed?	Yes, as long MR2 moves because of its 4 legs. On one cycle of walking, each of the four legs needs to make contact with the ground and separated again.
26	Is it ok to touch the pole and the bridge?	Yes as long as the robot does not damage the poles and bridge or use them for changing direction or moving.
27	Can we use springs to move the MR2?	Spring cannot be used at the contact surface to propel/jump the robot up. MR2 must move because of the movement of its 4 legs. However, spring can be used as part of the leg mechanisms such as suspension or etc.
28	What does it mean by 'shuffling is not allowed'?	It is not allowed to drag any of the legs of MR2 on the field.
29	Can part(s) of MR2 other than its four legs touch the field or fence?	Only the contact surface of the four (4) legs of MR2 are allowed to touch the ground. (Rule 4.12.6).
30	Can the MR1 place the Gerege on MR2 without any gripping mechanism on MR2?	Yes, it is allowed. However, when passing on the Gerege, there must be a moment that both robots are in contact with Gerege at the same time (Rule 1.5.3)
31	Is there is any restrictions or specific rules for the MR1 Shagai throwing mechanism. For example, is MR1 allow to place the Shagai on a platform and the Shagai will be launch from the platform using a spring.	Any throwing mechanism that does not damage the Shagai and the field is allowed.
32	I would like to ask if MR2 is allowed to cross the Sand Dune without stepping on	Yes. It is not necessary for MR2 to touch/step on the

Q&A



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THANK YOU!