



DD-ROBOCON 2019 Solution Ideas (Form 1)



As a part of Stage 1, all teams need to submit the following online (Google Form) by the deadline specified in the website:

1. Their “Solution Ideas (Form 1)” in the following ONE-PAGE .pdf format.
2. A .pdf file titled “Design Details Document” with a maximum of 5 pages to expand their points/claims given in the Solution Ideas (Form 1).
3. A link to the repository with the CAD models of the robots in STEP format must be provided. No changes in the CAD models will be recognized after Feb. 15, 2019.

University/College/Institute Name:

Name of the team leader: **Mayank Tripathi**

Email Address of the team leader (Same as in the Google Form): **mayank.me16@gmail.com**

- **Design of MR1**

- a. Overall dimensions (in mm) and estimated weight (in kg)

(L x W x H) = (837 x 750 x 559)mm and 20.41 kg

- b. Type of drive

Four wheel Omni directional drive

- c. Actuators and sensors integrated

LSA08, Johnson & DC geared Motor, linear pneumatic actuators

- d. Gerege holding and passing mechanism

Pneumatic Gripper based on slider-crank Mechanism with Parallel jaws for holding and passing Gerege

- e. Shagai placing and throwing mechanism
-

- **Design of MR2**

- a. Overall dimensions (in mm) and estimated weight (in kg)
-

- b. Drive mechanism (4-legged mechanism)
-

- c. Actuators and sensors integrated
-

- d. Gerege holding and raising mechanism
-

End of Document