



CSD ROBOCON NITK

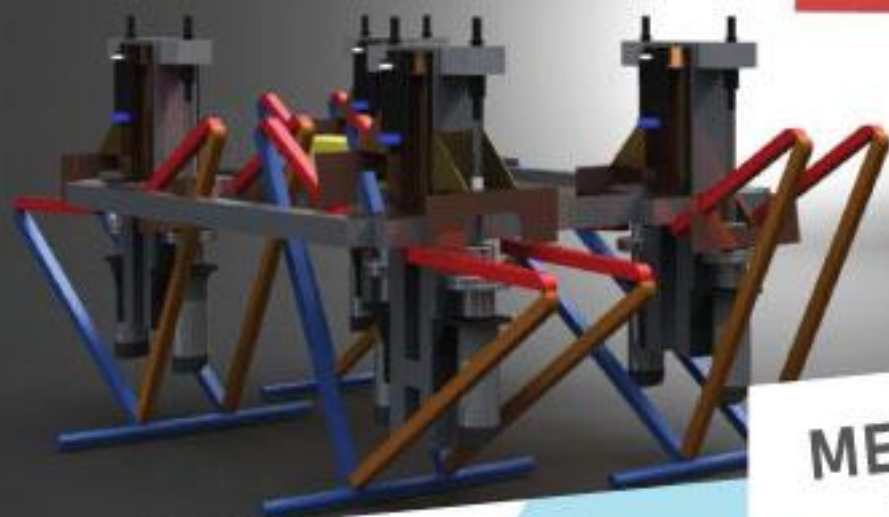
passion, innovation, dedication



20  
20


ROBOCON BOTS 2018-19

MESSENGER ROBOT 2




MESSENGER ROBOT 1

ROBOCON  
BROCHURE

 CSDRoboconNITK

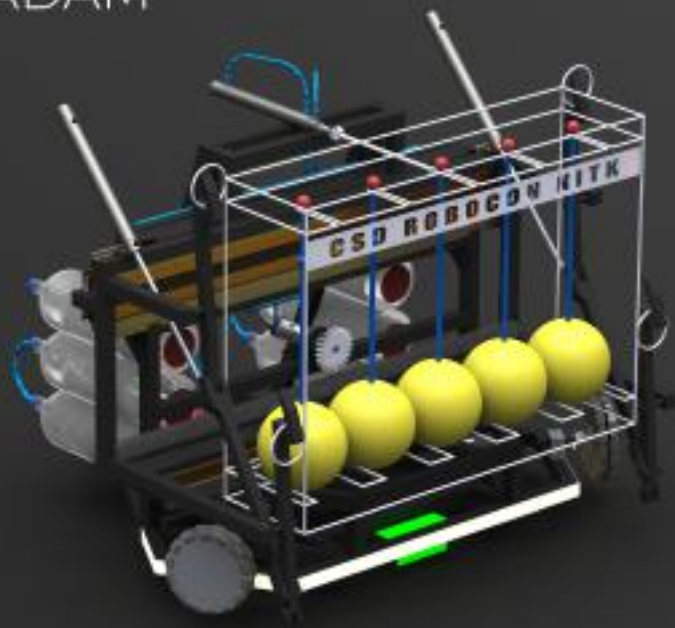
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 CSD Robocon NITK

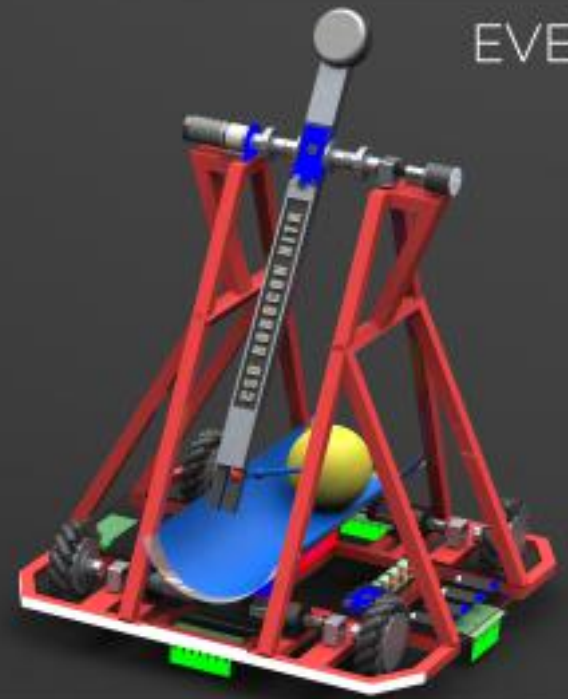
 Vivin, Marketing head | 8123794979

# What is CSD Robocon NITK?

ADAM



EVE



## ROBOCON BOTS 2017-18

CSD-Robocon-NITK Team takes part in the Ultimate Robotics Contest for Undergraduates – ABU Robocon. We build Robots that aim at incredible Precision, Reliability and Speed or in other words Industrial performance. Every year (since 2002), one of the member countries of Asia Pacific Broadcasting Union which Doordarshan-India is part of, hosts the ABU Robocon. In August of 2017, theme and rules for ABU Robocon 2018, were announced by Vietnam and the journey began for the First Team from NITK to take part in Robocon.



# AWARDS

To take part in Robocon, the team must not only be proficient and innovative in Mechanical Design, Electronics Design and Programming but also back it up with soft skills like Building/Manufacturing skills, Management (Time and Resources and Team Dynamics), but above all must have a constant drive and motivation to keep going ahead.

As a new team, we are proud to say, we not only created two bots that reliably complete the task, but made NITK proud the first year itself, on National Television by bagging the "First time Best Usage of MATLAB" Award. Quoting Veer Alakshendra, Student Competition Technical Evangelist, MathWorks India Pvt. Ltd. "The MathWorks team was happy to see the model based design workflow: design, simulate and deploy...".



## **MATLAB AWARD**

for First time best usage of  
MATLAB



CSD  
ROBOCON  
NITK

MR1

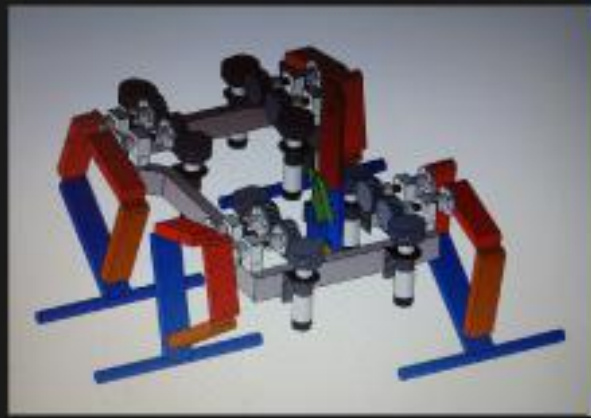
THE SKELETON OF  
MESSENGER ROBOT 1



MR1  
MESSENGER ROBOT 1  
FULL BOT

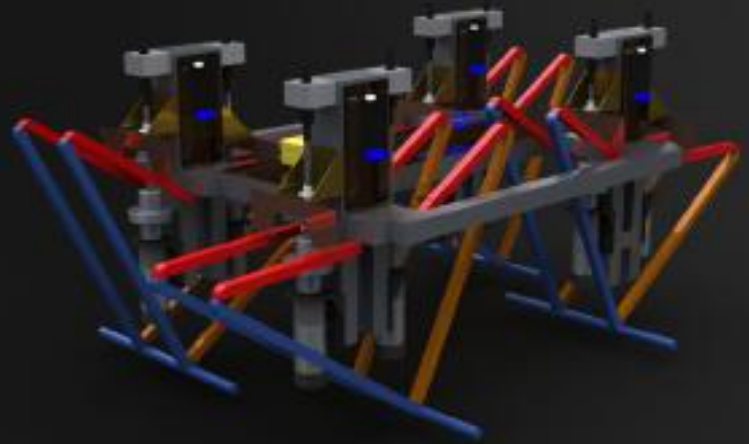






Initial design of 4 legged bot using worm gears and five bar linkage

Final design of 4 legged bot using five bar linkage and lead screw with RRRP 4 bar linkage



TESTING



MESSENGER BOT 2  
FINAL BOT





# YOUTUBE VIDEOS OF ROBOCON 2018-19



**MESSENGER ROBOT 1 - MR1  
FULLY FUNCTIONAL BOT**



**MESSENGER ROBOT 2 - MR2  
FULLY FUNCTIONAL BOT**



**SHAGAI PICKING AND THROWING  
MECHANISM  
ON THE MESSENGER ROBOT 1**



**MAKING VIDEO OF BOTS**

## PANAROMIC VIEW OF ROBOCON ROOM IN MAIN BUILDING ROOM 016





# EXPENDITURE AND FUNDING DETAILS

Arena building = Rs. 15000

Prototyping = Rs. 35000

Fabrication of pass robot

Rs. 30000 + lidar Rs. 30000 = Rs. 60000

Fabrication of try robot (kicking and throwing bot)

Rs. 40000 + lidar Rs. 30000 = 70000

Rugby ball and tee for testing =

$3 \times 500 + 1500 = 3000$

Miscellaneous - Rs. 17000

**Total = 2,00,000**

**FUND US HERE**

**ACCOUNT DETAILS:**

**NITK/KREC ENDOWMENT FUND**

**A/C No : 37481178720**

**(02273) - SURATHKAL**

**N.I.T.K. CAMPUS, SRINIVASNAGAR POST**

**MANGALORE 575025**

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**IFSC Code : SBIN0002273**



**ALL DONATIONS MADE TO  
THE ROBOCON TEAM ARE  
SUBJECT TO 80G 100%  
TAX DEDUCTION**

Donors residing outside India can also transfer donation amount using "SWIFT" code of SBI, Mangalore SBININBB146 or through alternate means such as Internet Banking Facility.



# CSD ROBOCON NITK TEAM 2019-20



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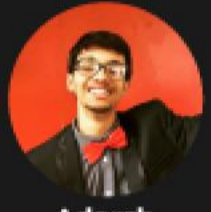


Raghavendra

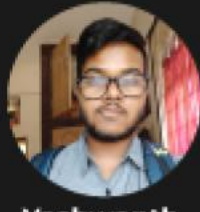
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## ELECTRONICS AND PROGRAMMING TEAM



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Sayak



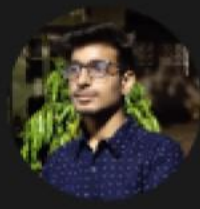
Gaurav



Ibrahim



Rohan



Chandan Kumar



Jeevith



Vineeth



Shyam



Manan



Vishwa



Chandravarman



Nishanth



Gaurav



Manasa



Bhagyashree(MEDIA)

## FACULTY ADVISORS



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