

ReDySim Conclave

Brief

This program intends to help participants to solve the fundamental dynamics of multibody systems using the Recursive Dynamics Simulator (ReDySim). ReDySim is a DeNOC-based recursive solver programmed in the MATLAB environment for the dynamic analysis of robotic and multibody systems. It consists of efficient recursive inverse and forward dynamics algorithms for the simulation and control of open and closed-loop multibody systems.

Theme

Role of Robotics in achieving United Nations Sustainable Development Goals and approach of solution of part of the solution using ReDySim.

Eligibility

Students/Faculty Members/Employees from any institution interested in robotics and multibody dynamics.

Modality

This conclave will take place physically at the IIT Delhi campus under the guidance of Prof. Subir K. Saha (IIT Delhi) and Prof. Suril V. Shah (IIT Jodhpur).

Important Dates

Call for Participation: 10th September 2023

Last Date of Registration: 15th December 2023

Last Date of Slides Submission: 28th January 2024

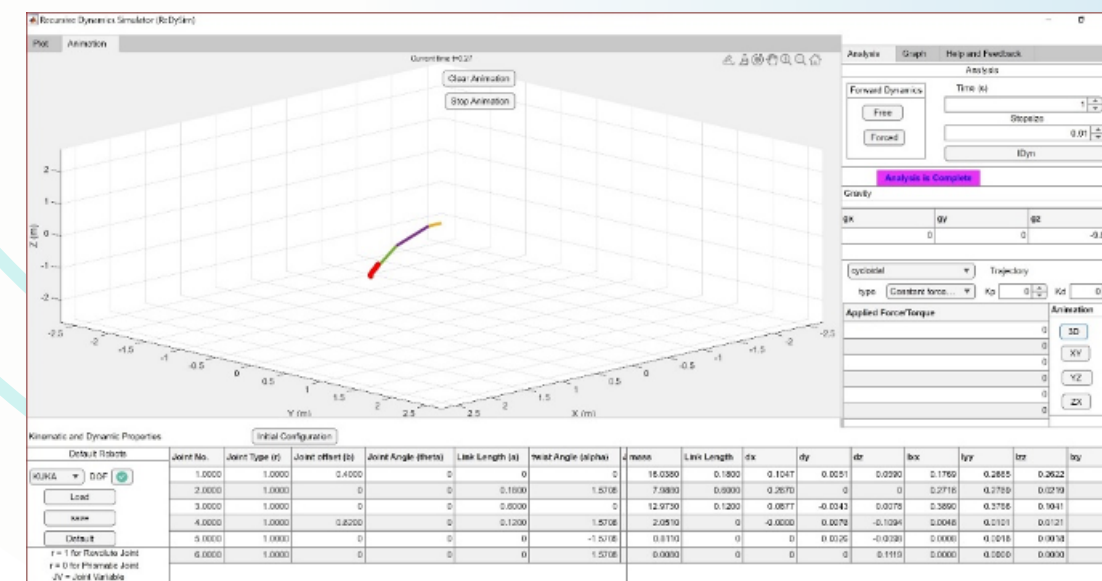
Date of Conclave: 10th February 2024

Programme

Participants will be using ReDySim to implement an innovative solution based on the theme and will make a presentation (6 slides) on it. The presentation will be submitted to the organizing team for evaluation. Selected participants will be invited to IIT Delhi to present their ideas and interact with other invited participants.

Invited participants will also receive a certificate and a prize.

GUI Application



Benefits to participants

- Opportunity to learn ReDySim and MATLAB.
- Learning to solve multibody dynamics problems.
- Experience of working in a team with members across the country (and possibly the world).
- Skill of making a good presentation.

Certification

On successful completion of the competition, the participants will be given a certificate as a part of their presentation, and their names will be recorded on the ReDySim website, along with the slides (presentation) submitted by the teams.

Organizing Team

- Prof. Subir K. Saha, IIT Delhi, New Delhi
- Prof. Suril V Shah, IIT Jodhpur, Jodhpur
- Prof. Paramanand V. Nandihal, Sister Nivedita University, Kolkata
- Mr. Alinjar Dan, Ph.D Student, IIT Delhi
- Mr. Saurabh Chaudhary, Ph.D Student, IIT Jodhpur
- Mr. Aman Gupta, B.Tech Student, IIT Jodhpur

Registration

Registration Charges: Free

Online Application Link: <https://forms.gle/a61bbFaf6gMnHSaYA>

Contact Email: redysim.help@gmail.com

*The authors are encouraged to download and use only the GUI version of the ReDySim available [here](#).