

About me

I am a PhD scholar and Prime Minister Research Fellow at Robert Bosch Centre for Cyber Physical Systems (RBCCPS) in IISc Bangalore.

I received by B.Tech. degree in Mechanical Engineering (2020) from National Institute of Technology, Raipur.

I started my career in the field of robotics especially on human robot interaction. My primary focus as a PhD student is on trajectory prediction using Inverse reinforcement learning, inverse optimal control, and other machine learning algorithms. I expanded my domain to control system, human-computer interaction for AR,VR and MR interface.

I work in [I3D lab](#) and Nahar Centre for Robotics and Prototyping at IISc Bangalore under the supervision of [Prof. Pradipta Biswas](#).

Publications

- *Inverse Kinematics Analysis of Cassie Robot using Radial Basis Function Network*
Mukund Mitra, Suman Raj, Shishir Kolathaya
2021 International Symposium of Asian Control Association on Intelligent Robotics and Industrial Automation (IRIA) DOI:
10.1109/IRIA53009.2021.9588698

Achievements

- **Prime Minister Research Fellowship**, August 2021.
- **Best paper award** titled "*Inverse Kinematics Analysis of Cassie Robot using Radial Basis Function Networks*" in **IEEE International Symposium of Asian Control Association on Intelligent Robotics and Industrial Automation (IRIA)**, 2021.
- **Late Breaking Result** for poster presentation on "*Tour Guide Social-Robots Task Coordination in Dynamic Indoor Environment*" at **IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS 2021)**, 2021.
- Participated, qualified, and successfully completed **IEEE Robotics and Autonomous Systems (RAS) Winter School** on "*SLAM in Deformable environments*", **Robotics Institute at University of Technology, Sydney**, 2021.
- Participated, qualified, and successfully completed task on "*Design and Analysis of Bio-inspired tricopter with Delta Manipulator for Industrial Applications*" in **ASME, Student Mechanism and Robot Design Competition (SMRDC)**, 2021.

- Presented as a speaker on “*Human Aware Robot Motion Planning using RRT Algorithm in Industry 4.0 Environment*” in **IEEE Women in Science in Engineering group**, Department of Electrical Engineering, IISc Bangalore, 2021.
- Acquiring **Prime Minister’s Sarvottam Trophy** in honour of outstanding academic performance and **Prime Minister’s scholarship** for 2016-2020.

Position of responsibility

- Member of Science for Rural India, SFRI.

Projects

Please visit my website - <https://mukundmitra.com/projects/>

Contact

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