KITTY ROBOT

Models and Robotics Section, Student Technical Council, IIT Roorkee

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## About

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| Introduction  Less than half the Earth's landmass is accessible to existing wheeled and tracked vehicles. Our mission is to develop a rough-terrain robot that captures the mobility, autonomy, and speed of living creatures. Kitty will travel in outdoor terrain that is too steep, rutted, rocky, wet, muddy, and snowy land which clutter limit the utility of wheeled vehicles. Kitty Robot is aimed to be a dynamically stable quadruped robot with sophisticated computing, and power systems, advanced actuators and dynamic controls. For Short missions, the whole gear weighs nearly 58 Kg.  Weight decreases the amount of food and ammunition that can be carried in a single deployment, so supplies are to be provided  to them again. Providing Backup Supplies and Care packages to soldiers increases the risk of life for Backup team. Kitty uses 4Lipo batteries(1 for each leg) which drives 8 Worm-Gear motors. Each leg has 2DOF. Each actuator unit consists of a rotary encoder attached to it for the feedback of angular rotation of leg about a joint.  Our Proposal  Utilize the space here for preliminary information about the project, motivation, execution, composition etc.  Team Size: 8  Impact on Society:  Ongoing Work  Problems With Current Robotic Waiters  How are we different from others?  Team Composition  Nitin Yadav  Yawan Gupta  Harshil Kumar Patel  Ujjwal Baranwal  Divyansh Gupta  Prashant Kumar  Avdesh Ranwa  Yashutosh Bansal |

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## Impact

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| Include key achievements, publications awards etc.  Highlight key learnings developed through the project etc. |

## Contact

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| Models and Robotics Section  IIT Roorkee  Mail ID: [nyadav@ee.iitr.ac.in](mailto:nyadav@ee.iitr.ac.in)  Website: mars.iitr.ac.in |