Improving Hexapod Performance
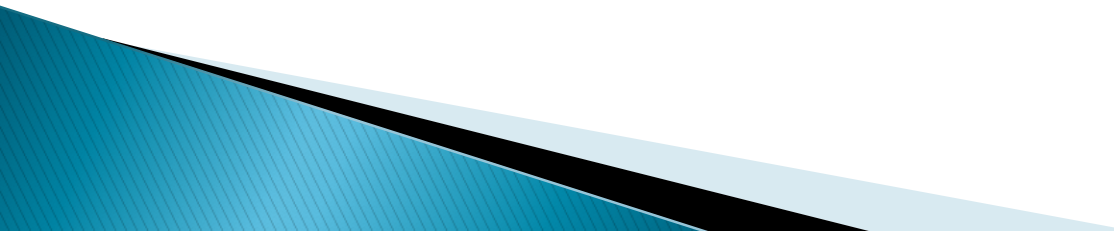
10305056:Srijit Dutt
09305073:Udaya Kumar
09305063:Venkatesh Velaga
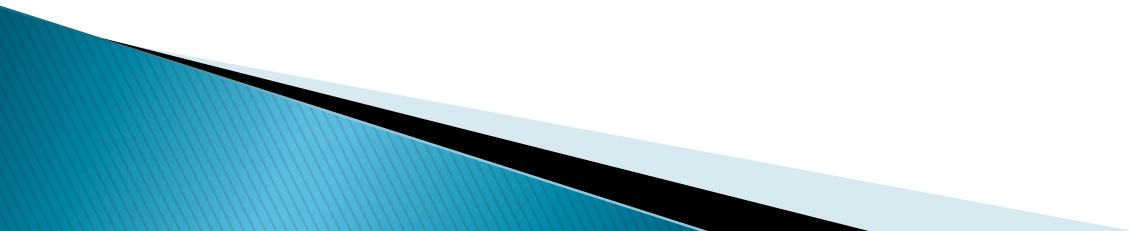
Agenda

- Introduction
- Hexapod in ERTS Lab(Present Functionality)
- Our Aim
- Requirements specification
- Project Management

Introduction

▸ What's a Hexapod

A **hexapod robot** is a mechanical vehicle that walks on six legs. Since a robot can be statically stable on three or more legs, a hexapod robot has a great deal of flexibility in how it can move.
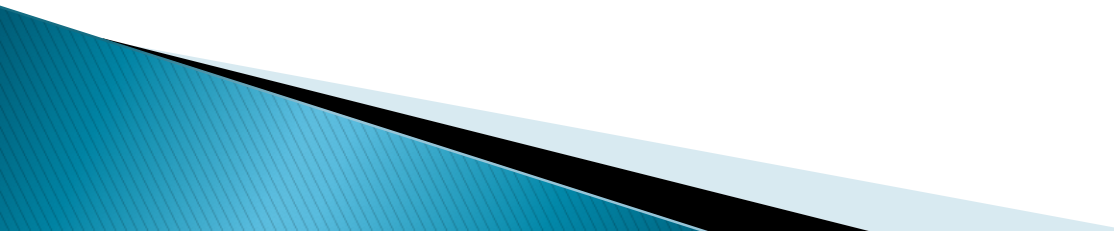
Hexapod in ERTS Lab(Present Functionality)

It can just be able to move in an arbitrary direction with some hardcoded snippet of code is embedded into it.
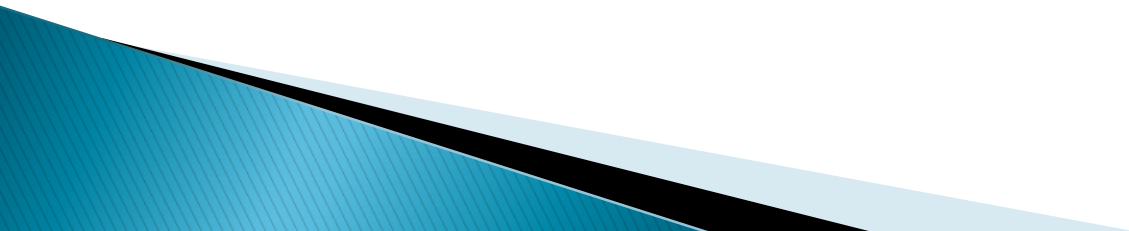
Our Aim

- Making the hexapod move in any direction smoothly.
- Interfacing the robot with computer and making the motion of robot controllable by the keypad.
- Obstacle Avoidance by using IR sensor.
- White Line Follower Hexapod.
- Obstacle Avoidance using webcam

Requirement Specification

- Hardware Requirements
  - IR Sensors
  - White Line Sensors
  - Web Cam
- Requirements from Lab
  - Flexible Working Hours (if possible)
  - Technical Assistance from lab (if required)
  - Testing environment required for testing our module

Project Management

- Making the robot move in all directions(Srijit Dutt:10305056)
- Interfacing through USB and making hexapod controllable with key pad(Venkatesh:09305063)
- Obstacle Detection and Avoidance(Using IR sensors and Web Cam): Uday(09305073) & Srijit(10305056)
- White Line Follower Hexapod(Venkatesh:09305063 & Uday :09305073)
- Documentation(All the three will be contributing to it)