ITSP – 2016

Team Members:

Mrunal Chavan

Shivani Sontakke

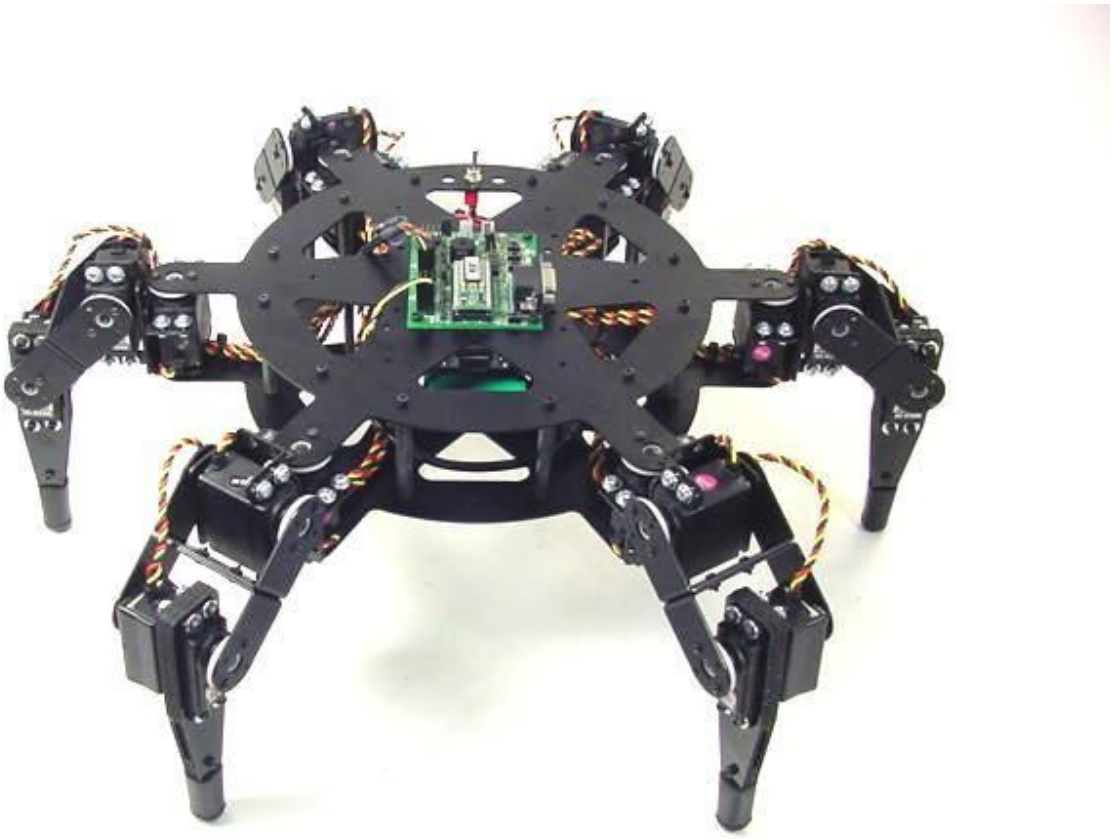
Parnashri Wankhede

Club: Robotics Club

Hexapod

What is a Hexapod?

The Hexapod is an insect inspired robot which has six legs that enables it to move flexibly on various terrains. The main advantage of this type of robot is its stability. Unlike bipedal robots, this robots is statically stable; therefore they don't have to depend on balance mechanisms. Although it needs feedback and positive reaction to acquire smoother walk. This type of robot can be used for many application in real life, such as search and rescue application, environment exploration, and also as a CNC machine.



Components Used

- 18 Servos-NRS-785
- Acrylic
- Various electronic items
- Atmega 32-As The CPU of the Hexapod
- Lithium ion Battery-12V

Total Cost is Estimated to be About Rs 8,000 to Rs 10,000. It may vary depending on more understanding of the tech used by our team.

Plan Of Action

Week 1

- This week we plan to
    - Learn about servos
    - Decide which servo to choose
    - Research about the microcontroller/servo controller.
    - Research and decide on the battery
    - Learn Solidworks

Week 2

This week we plan to

- Make rough protoype
- Make solidworks models of parts

Week 3

This week we plan:

- Get parts cut
- design PCB
- Study Gaits for walking

Week 4

This week we plan:

- Giving PCB for printing
- Modification of leg design

Week 5 and 6

- Finishing touch