BASIC SWARM ROBOTICS

Swarm Robotics is revolutionary phenomenon. We plan to embark upon making a simplistic model of what can be extended to the next level. What we anticipate to do, is making three robots which can coordinate among themselves to do simple tasks like forming a line, passing information from one bot to other, transfer objects et cetera. The main aim though will be to make bots which transfer colored boxes in coordination with each other by using their own intelligence.

MOTIVATION

2014 Oscar winning animated feature film Big Hero 6. Though the movie potrays technology way beyond the current scope ,we plan to make the most primitive form of that technology . You can refer to this link
https://www.youtube.com/watch?v=cJupofhcWTM

BROAD VISION

As mentioned earlier this is the technology the future generation will take birth to witness.

SKILLS WE INTEND TO LEARN

1. Raspberry Pi
2. Image Processing
3. Python Coding
4. Artificial Intelligence

We would like to request workshops on a few of these topics baring Python .

WHAT WE MAY/WILL NEED

1. 3 *1 Raspberry Pi 's - Cost Approx 9750/-
2. Overhead Camera - Worth 500 INR

These two are the prime necessities .The rest of the materials will be the normal ones we need for making a moving robot . Also note that the use of 3 Raspberry Pi 's is still an uncertainty and we may consider moving to Arduino depending on the functionality.

ACKNOWLEDGMENTS

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