LT1 - Intro

The code is written using the ROS indigo framework using Python, the robots have a depth camera. We will be using SVN version control.

It's worth having reporty people in your team.

Exercises

Ex 1. Particle filter

- 30 Marks
- Due 11th Oct
- Viva. 12th Oct

Ex 2. Your own idea

- 70 Marks
- Demo 20% - 15th Nov
- Report 80% - 8th Dec

Learning outcomes

1. Program autonomous robots
2. Implement signal processing and control algorithms
3. Describe and analyze robot processes
4. Write technical reports
5. Use experimental methods

Exercise points

All of the coursework needs to be experimentally evaluated using suitable scientific methods - How it failed? - Why did it fail? - In what circumstances does it fail? - You need to justify any choices you make - Evidence based engineering - Statistical analysis

Moravec's Paradox

- *Easy* - Mathematics, Chess, Expert systems

- *Hard* - Seeing, Conversation, Walking

What's easy for humans is hard for robots and vice versa.