# 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.