Principles of Robot Autonomy I

Section 7: rosparams and Dynamic Reconfigure

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Aims

- Learn about ROS parameters
  - Values that can be shared across nodes
- Learn about dynamically reconfiguring those parameters
  - E.g Lighting might change from one place to another, want to change camera exposure settings
- Work on any remaining bugs in your robot planners and controllers

rosparams

- Values like mass or height are static properties of your system, ones that you don’t want to copy and paste to every piece of software in your stack
  - rosparams are shared between nodes
- Values like camera exposure settings and controller gains are dynamic properties, able to change to fit the situation
  - Having the ability to change them on the fly without editing code is nice!
- The same launch file can have different behaviors depending on what parameters are set when it’s called
  - E.g. by other launch files

Section 7

- ROS parameters and how to dynamically change them
- Continuing planning and control with the robots