

Robot planning and its applications

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Contents

1 10-09-2025	1
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1 10-09-2025

The deliberative paradigm is a top-down philosophy where the robot:

- Senses the world
- plans a course of action
- implements the plan

This paradigm, for as simple as it is, makes some assumptions. It assumes for example that the environment does not change while the plan is being implemented.

The reactive paradigm simply senses the state of the system and performs an action informed by it. This is a much more simplistic approach on a technical level but has more limited application. Complex actions are formed by emerging behaviours.

The hybrid paradigm makes a mix of both. It creates a long term plan (deliberate) and reacts to the environment in real time (reactive) while performing it.