Lazy Robotics

René van de Molengraft, Herman Bruyninckx
Format the text by increasing or decreasing the list level.

Place cursor in the text and use these 2 buttons (tab Start - group Paragraph):

1 = Normal text
2 = Paragraph text
3 = • text
4 = • text
5 = • text

2

Lazy Robotics
Bringing object from A to B with \( x \) (n)m accuracy
Robotics ≠ Motion Control
Lazy Robotics

• don’t do more than needed for the task

• towards a more open world
Two ways to be robust

- enclose variety
- ignore whatever can be ignored
Lazy Robotics

- focus at task-related aspects of the world with the required resolution
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"ATTACK OVER RIGHT"

Zoom in - zoom out

"SCRUM"
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Lazy Robotics
Lazy navigation task

1. semantic static map
2. global task plan ("TomTom")
3. traffic rules
4. allowed actions
5. moving objects
6. action follows from 1 to 5
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15 Lazy Robotics
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Lazy Robotics
A different kind of lazy

- "Pick-up the cup" experiment!
Lazy Robotics

- robust by resolution
- open-loop with monitoring
- use environment
- reduce complexity
- explainable
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