



Robot Autonomy

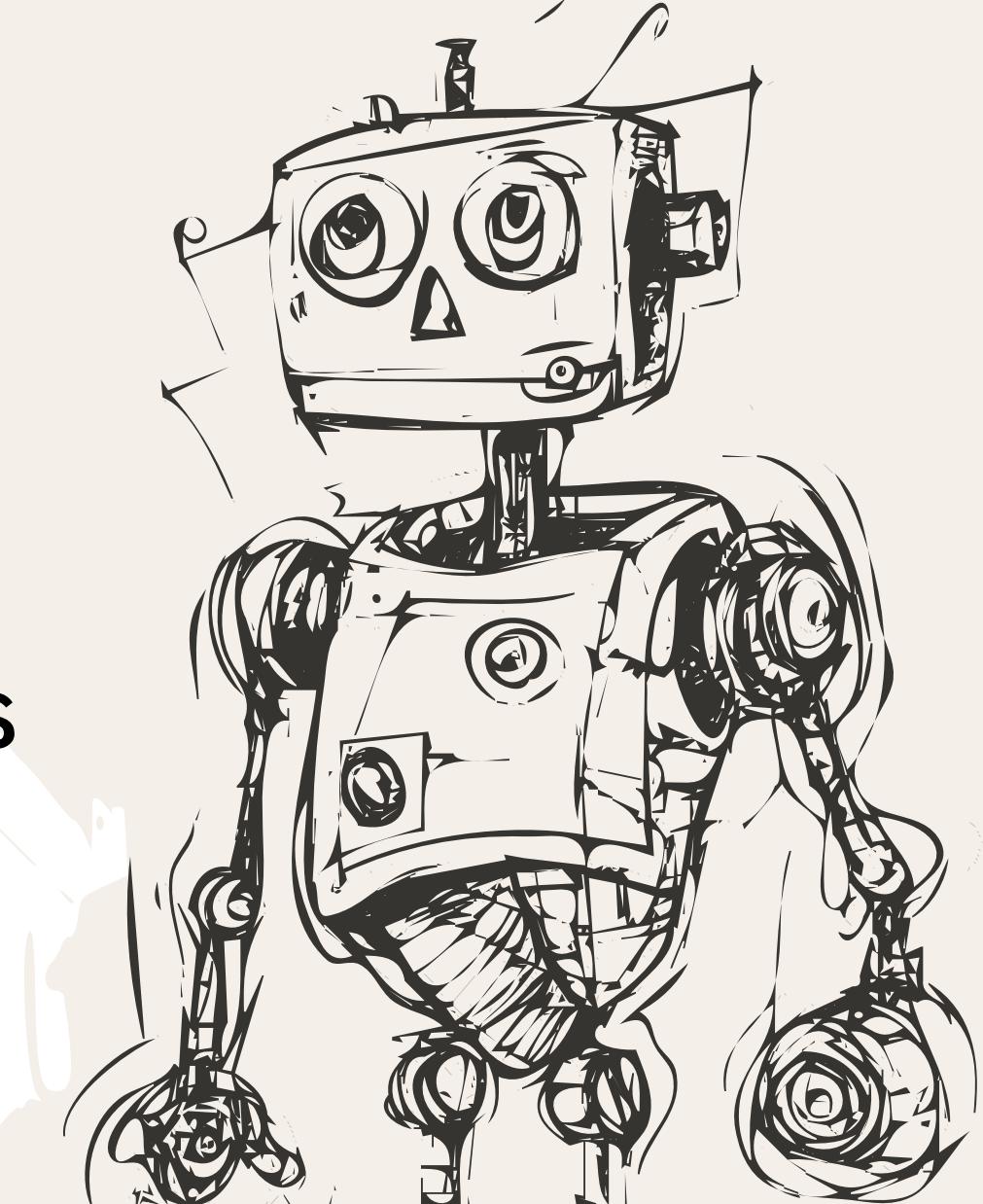
Autonomous and intelligent robots

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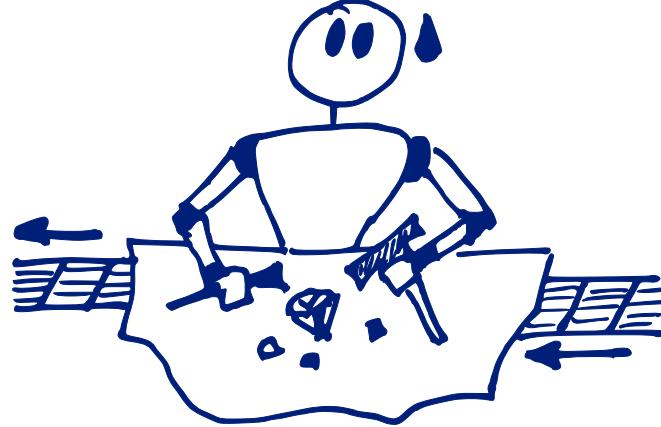
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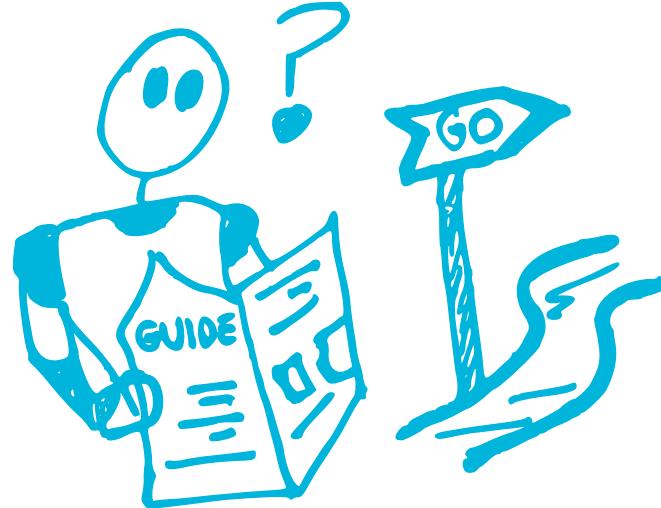
Oct. 8 2024



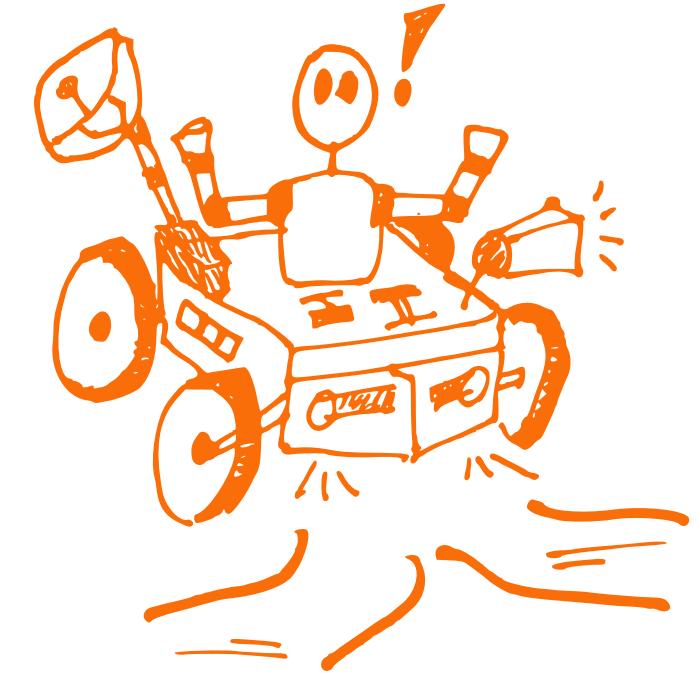
Key ideas



One, two, three ... again

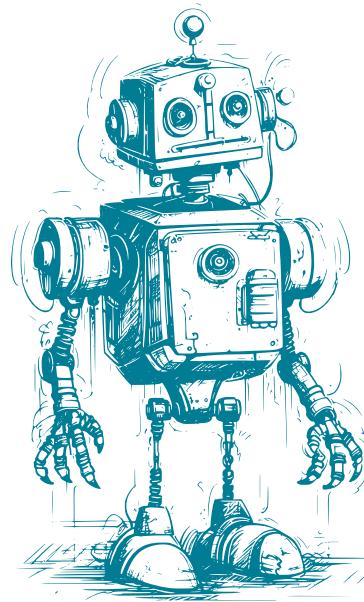


Where should I go?



Is there any life waiting
to be discovered?

What does autonomy mean in
robotics?



Cleaning floors by convering the entire house

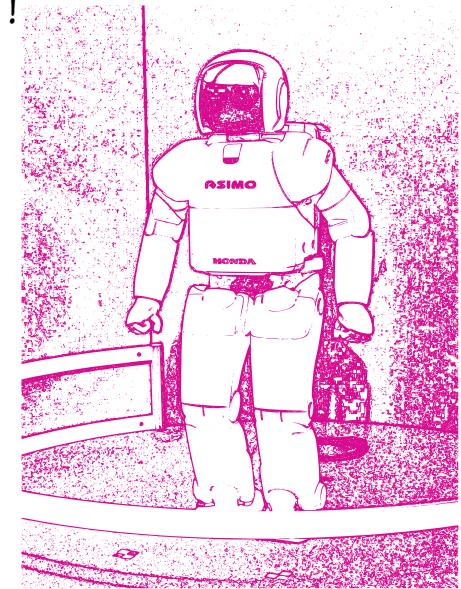
A draw of a robot generated with AI in [Freepik](#)

Should a robot be **autonomous**

Yes, of course !!!

Why?

- Minimize working load and maximize productivity
- ✗ Perform continuos work even without constant human communication/supervision



ASIMO (2000) at the Expo 2005 from [Wikipedia](#)

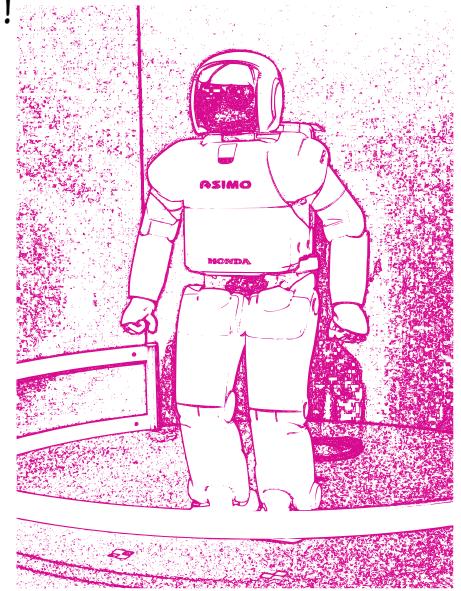
Should a robot be **autonomous**

Yes, of course !!!

Why?

How?

- ⚙️ Ability to take own decisions based on sensor data
- 🤖 Interact with the environment based on any kind of manipulation/communication



ASIMO (2000) at the Expo 2005 from [Wikipedia](#)

What robots are there today?

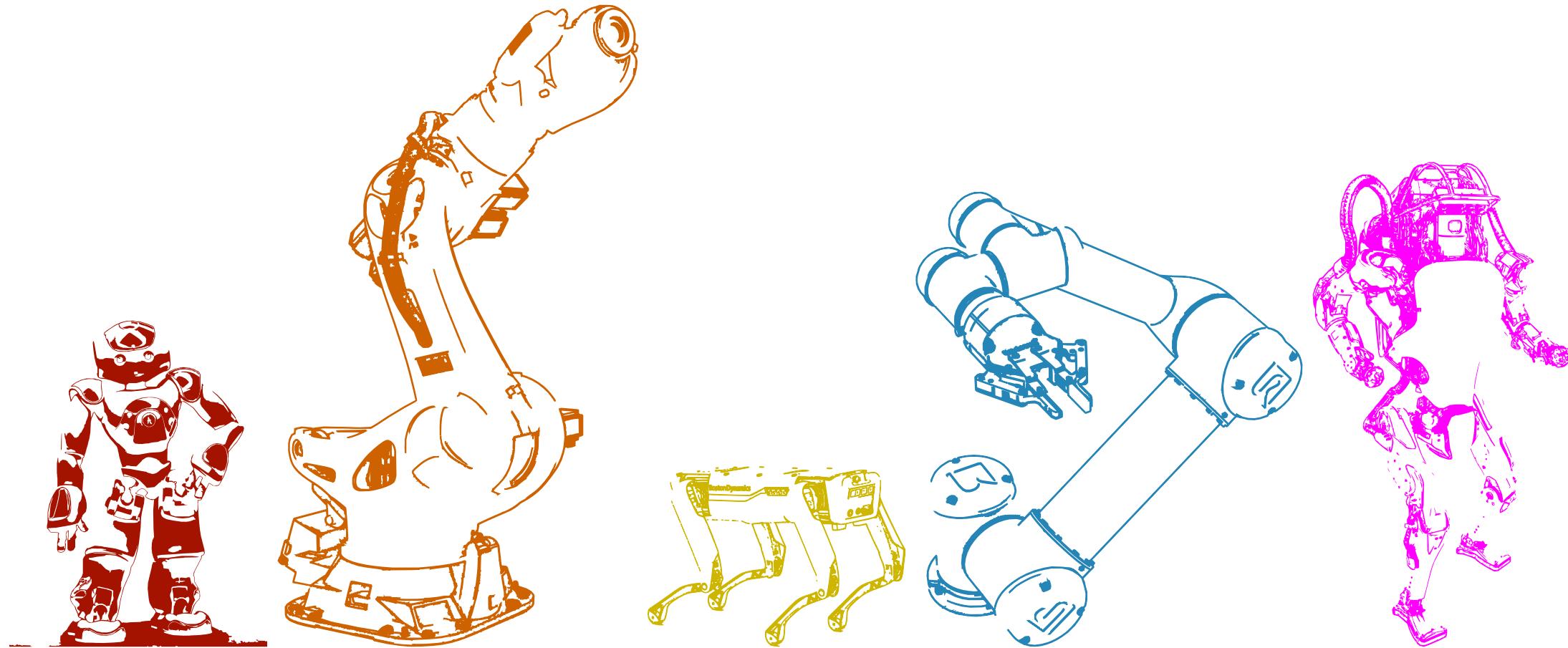
State of Art

Autonomy



Intelligence

Commercial robots today



Nao robot, Kuka robot arm, Spot mini dog, UR5 Cobot y Atlas robot

- ⌚ Slides based on emitanaka.org/slides/Ihaka2022/
- QR >_ Created with Quarto
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