01. Introduction

Robot Operating System (ROS) introduction

Robot definition

- **Joseph Engelberger, pioneer in industrial robotics:** *"I can't define a robot, but I know one when I see one."*
- **Wikipedia:** *"A robot is a machine—especially one programmable by a computer— capable of carrying out a complex series of actions automatically. Robots can be guided by an external control device or the control may be embedded within. Robots may be constructed on the lines of human form, but most robots are machines designed to perform a task with no regard to their aesthetics."*
- **ISO 8373:2012 Robots and robotic devices – Vocabulary, FDIS 2012:** *"A robot is an actuated mechanism programmable in two or more axes with a degree of autonomy, moving within its environment, to perform intended tasks."*
- **Rodney Brooks, Founder and CTO, Rethink Robotics:** *"A robot is some sort of device, wich has sensors those sensors the world, does some sort of computation, decides on an action, and then does that action based on the sensory input, which makes some change out in the world, outside its body. Comment: the part "make some change outside its body" discriminates a washing machine from e.g. a Roomba."*