



Hochschule
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Introduction to ROS

Foundation Course

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1. What is ROS?

1.1 What ROS is

1.2 What ROS is NOT



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What ROS is

Robot Operating System

- Short for: Robot Operating System.
- A collection of libraries and tools.
- It helps software developers create robot applications.

How Robotics
Research Keeps...

Re-Inventing the Wheel

First, someone
publishes...



...and they write
code that barely
works but lets
them publish...



...a paper with
a proof-of-
concept robot.



This prompts
another lab to
try to build on
this result...



But inevitably,
time runs out...



...but they can't
get any details
on the software
used to make it
work...



...and countless
sleepless nights
are spent
writing code
from scratch.





So, a grandiose
plan is formed
to write a new
software API...



...and all the
code used by
previous lab
members is a mess.

What ROS is

Robot Operating System

- A way to standardize writing software for robots.
- It enhances **code reusability** .
- ROS is open-source .
- It is a meta-operating system.
- ROS can be installed on Ubuntu and Debian (so it's currently supported on Linux only).

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