Place: ALFA

Date: Friday, 7th March 2025

Time: 10:00 – 15:00

Aim: Setting up a development environment for ROS1/2 on a freshly installed Ubuntu, utilising best practices, and discussing the way forward on how to teach such content within REALTEK.

ROS INF205 Workshop Programme

10:15 – 10:35	Presentation 1 by Håvard Pedersen Brandal • ROS2 basics (modules, approach to development) • Python vs. C++ (Catkin Development Environment) • URx robot arm control + UR driver in ROS
10:40 – 11:00	Presentation 2 by Igor Ferreira da Costa • ROS2 and Python • Simulation environment • Gazebo 1 vs Gazebo 2’
11:05 – 11:25	Presentation 3 by Lucas Vares Vargas • Creating a robot in Gazebo • Integrating it with MoveIt • MoveIt with C++
11:30 – 12:30	Pizza break + Coffee + Discussion
12:35 – 12:55	Presentation 4 by Michael Angelo Amith Fenelon Uses ROS2, 6-DOF manipulators
13:00 – 13:20	Presentation 5 by Gabriel Lins Tenorio • Application: mobile robot for measuring sugar content in strawberries • Presentation of a GUI for robot control • How to create a basic GUI with Tkinter in Python
13:25 – 14:10	How to set up a development environment, practice session
14:15 – 15:00	How to teach this within INF205 in the future? • Present emnerevisjon (for vår 2026) • How to even split INF205 further into two parts (from 2027) - should we?

The last point on the list can take longer than mentioned, in case we experience any challenges. Time-slot for each presentation is 20 minutes (10-15 minutes for the presentation and 5 minutes for questions/discussion) but is not strict. If you need more time to present is not a problem.

There will be two PC prepared with freshly installed ROS1/ROS2 as well as a TurtleBot 3 Burger for us to play with.