ROSCon FR&DE 2025

WORKSHOPS

Workshop Title	A pipeline for Robot Deliberation from the CONVINCE toolbox
Names of principal instructors	Matteo MORELLI (CEA) / Christian HENKEL (Bosch Research)
Number of supplementary instructors	0
Maximum of participants	20
Language	English
Workshop duration	4h
Required material	
Skills required for participants	Intermediate / Expert

| Brief description | The CONVINCE Project(*) develops an open-source toolbox(**) to enable robust robot deliberation.

This workshop is a hands-on session where participants will setup and run our pipeline of components from the CONVINCE toolbox, including semantic anchoring, planning, verification and run-time monitoring of system properties. Semantic anchoring produces a symbolic representation of current observations of operational environment for a task planner, which computes an action plan for a given goal.

Verification allows to check system performance. Run-time monitors detect violations of properties to enable dynamic replanning, that adapts the system to unexpected situations.

Participants will experiment the pipeline with a simulated mobile robot that reactively manages its battery and avoids obstacles.

(*) https://convince-project.eu/
(**) https://convince-project.github.io/overview/ |