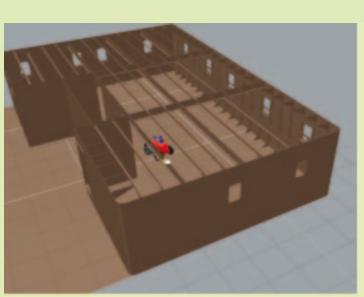




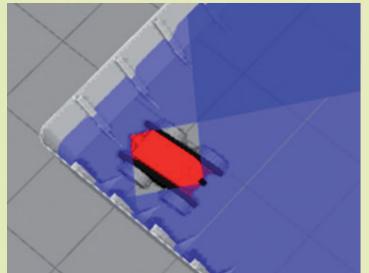
## Cooperative robot for large spaces manufacturing

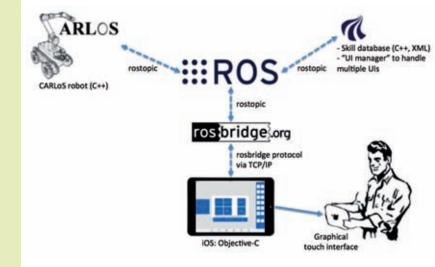
## The major features of the CARLoS robot are

- High mobility inside ship blocks
- Semi-autonomous decision-making on the work to do
- Autonomous stud welding capability
- Autonomous pre-outfitting marking capability
- Highly usable and easy controlled by a shipyard worker
- Skills-based programming









## Project

CARLoS project aims to apply recent advances in cooperative mobile robotics, to a representative industrial scenario in shipyards. CARLoS robot will be built using off-the-shelf technology under a modular approach. The final prototype will be demonstrated as a robot co-worker for outfitting operations (stud welding and marking) inside blocks of ship superstructures. Currently, there is no automated solution to these tasks.

## CARLoS project will contribute to strength technology and market position of:

- European SMEs that develop, supply, and integrate mechatronic, sensing, and electronic technologies for industrial applications.
- European SMEs providers of outfitting services to shipyards, as well as small shipyards.



















**Partners** 













