

Keynote: Working with Robots in Smart Homes and Smart Factories – Robotic Co-Working

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Co-working is a new trend for integrating service robots into smart environments, such as homes or assembly lines of manufactories. Modern sensitive robots recognize human beings in their neighborhood and stop when touched, so that they can be integrated into their environment much better as in the past. Robots come out of the cage, and this creates a lot of opportunities for scalable automation in home and factory.

In the future home, service robots will help elderly and handicapped people. In manufacturing lines in small and medium enterprises, simple steps can be taught to a smart robot, while the difficult steps can be left to humans.

In both application areas, due to the safe integration into the smart environments, the investment costs for the use of robots sink considerably, and the degree of automation can be scaled accordingly. For industrial workshops, this new deployment model of sensitive robots will have a tremendous effect on all kinds of manufacture, because it shrinks the costs of robot-based automation and can be afforded by small companies.

Thus, entire industries could make use of robots that did not deploy them so far. For the smart home, this means that once a sensitive service robot costs less than 20kEuro, the support of elderly people with automation-based services might become affordable and economic.

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