



PRESS RELEASE

INTELLIGENT ASSISTANCE FOR CUSTOMER SERVICE AT INNOROBO 2017 – WITH SEMVOX AND UNITY ROBOTICS

Saarbruecken / Waldenbuch, May 9th, 2017

At InnoRobo 2017 in Paris, from 16 to 18 May, SemVox and Unity Robotics will present the service robot Care-O-bot[®] 4 with its advanced voice-based control interface based on SemVox ODP S3.

Kiosk systems were the beginning – but now and in the future, robots will play an increasingly important role in services and retail. With Care-O-bot[®] 4, the Unity Robotics founding team from Fraunhofer IPA presented a robot of this kind at the beginning of 2015 – and since the end of October 2016 “Paul” has been welcoming customers at the Saturn electronics store in Ingolstadt, and pointing them in the direction of their desired products. Paul knows the location of every product in the store and guides the customers to the appropriate shelf. Thanks to the SemVox ODP S3 software, he can even engage in small talk or give information about the weather – so the customers are never bored with Paul. For a detailed consultation on any product, Paul can summon a human colleague via Voice-over-IP.

Care-O-bot[®] 4: Modular design makes many applications possible

The Fraunhofer IPA originally developed the first prototype of the Care-O-bot[®] as an assisting robot for active support in households, nursing homes or hospitals. In cooperation with the design studio Phoenix Design and the company Schunk, they developed three years to complete the fourth generation. As a modular product family, the current version now offers a viable basis for commercial solutions. Fraunhofer IPA puts the exploitation of these possibilities into the hands of its spin-off company “Unity Robotics,” which adapts Care-O-bot[®] 4 to the needs of customers in various application domains

Intelligent Technology

Paul uses laser scanners, which are installed at about shin-height, for orientation in his surroundings. The software “Shore” and a camera even allow Paul to recognize the emotional state of the human conversation partner and react accordingly. The microphones are essential for voice recognition and give Paul – combined with other cameras for gesture recognition – comprehensive communication skills. Managing Director Dr. Ulrich Reiser explains: “We have developed navigation, dialogical communication and facial expressions specifically for the customer and implemented them together with the companies SemVox and Phoenix Design.”

ODP S3 as the basis for natural dialogue

Care-O-bot[®] 4 owes its ability to have an intelligent and charming conversation to the SemVox software ODP S3. Thanks to ODP S3 and the ODP Workbench, Unity Robotics was able to independently develop and integrate a next-generation intelligent interaction system for Care-O-bot[®] 4. In addition, ODP S3 provides advanced AI technologies that not only provide the usual capabilities of dialog-based voice control, but also provide far-reaching proactive assistance functions.



SemVox ODP S3 enables completely embedded, hybrid (connecting to cloud-servers only when required), or fully cloud-based solutions. It doesn't matter whether servers are privately hosted, distributed (and hence edge-computing-ready) or centralized – all of this works also cross-device.

Care-O-bot[®] 4 also for research and industry

Thanks to open interfaces and its modular architecture, the Care-O-bot[®] 4 can be used in many different ways: whether as night patrol, mobile information kiosk, for transport services in homes or offices, or as a museum robot. “We are still interested in getting as many scientists and companies as possible work with the system in order to broaden its possible applications,” says Dr. Ulrich Reiser.

About SemVox ODP S3

SemVox ODP S3 uses innovative semantic technologies and extensive ontologies. It's not only future-proof and highly flexible but also extremely powerful and serves as the basis for the connection of all kinds of apps, programs, databases and hardware. All these components are context providers for SemVox ODP S3 and allow it to perform highly complex reasoning processes – SemVox ODP S3 learns. And because ODP S3 based solutions can run independently from the operating system and without the need for an Internet connection, seamless cross-device integration isn't a problem either.

With ODP S3, cars, smart homes, robots and any other applications become truly intelligent assistants. This is how SemVox becomes the first and most reliable point of contact for integrators and OEMs who want to realize real conversational assistance in their products.

You can find us at Les Docks de Paris, Dock Pullman, booth Q03 (50 avenue du Président Wilson - 93210 La Plaine Saint-Denis) from 16 to 18 May 2017.

www.innorobo.com

SEMVOX | THE COMPANY

SemVox offers efficient and secure solutions and technologies for voice control, multimodal human-machine interaction and intelligent assistance systems, based on the latest AI technology.

SemVox was founded in 2008 and its more than 50 employees make information become usable in an intuitive way. No matter if speech input, gesture or touchscreen control, or even a combination of several input modes – SemVox technology gives users the freedom to choose the optimal input mode in any situation.

Based on ODP S3 (Ontology-based Dialog Platform), SemVox and its customers develop interactive, intermodal and intelligent solutions for the automotive sector, smart homes, consumer electronics and home entertainment, industry 4.0, medical technology and robotics. ODP S3-based solutions do not only offer the usual possibilities of a dialog-based voice control system but are capable of fulfilling far more complex tasks in a proactive way. ODP S3 even enables integrators to develop their own intelligent next-generation speech dialog systems and integrate them into their existing infrastructures. Our platform-independent solutions and technologies can be easily integrated on end devices (embedded, without the need of a cloud connection, making data really secure), run in a private cloud or intranet or in a hybrid system.

With more than 100 years of combined experience, SemVox also provides technology consulting services and supports customers in transforming ideas into innovations.

SemVox is an official [Nuance Master Distributor](#).

UNITY ROBOTICS | THE COMPANY

Unity Robotics develops, manufactures, and distributes robotics and automation solutions for the service sector. The focus lies on the provision of automated solutions to increase the productivity of service processes in public everyday environments such as large retail stores (e.g., electronics stores, DIY-stores) in hospitals, hotels, pharmacies or nursing homes.

The first product of Unity Robotics is a mobile service robot, which supports the retail sales process through navigation and information services as well as product-specific consulting.

Paul is based on the technology of the 4th generation of the service robot Care-O-bot[®], which has been developed since 1995 at Fraunhofer IPA. The modular architecture of Care-O-bot[®] 4 enables the efficient development of service robotics solutions tailored to customer-specific needs. It has a very compact footprint of 72 cm in diameter at a height of 1.6 m, which makes it particularly suitable for use in busy, narrow environments.

Unity Robotics was founded as a spin-off of Fraunhofer IPA 2015.

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