

BlueBotics Delivering Intelligent Navigation for Mobile Robots

Today, robotics is hitting the top of the technology hype cycle as a two edged sword. Various industry veterans have hailed robotics as a technology that holds eminent investment potential for its automation capabilities. However, there is a tempest occurring in the industry where various companies are making big promises with their hollow claims—raising the expectation levels difficult to reach. “At BlueBotics, we remain pragmatic, without hype statements,” says Nicola Tomatis, CEO, BlueBotics. “And primarily focus on B2B cases.” Born as a spin-off of the Autonomous Systems Lab at the Swiss Federal Institute of Technology in Lausanne (EPFL), BlueBotics is striving forward with a mission to automate the mobility of vehicles in the professional use market. Swiss based BlueBotics has maintained its focus on two key segments: Industrial automation and Service robotics. The company is known for its chief product ANT®, the innovative navigation solution that automates hundreds of indoor vehicles for production and logistics as well as new applications in the emerging service robotics market.



Nicola Tomatis

logistics, hospital logistics and cleaning, and is now growing in new markets and countries.

For the fast evolving, solution-orientated industrial automation, ANT® acts as the nerve center enabling mobility of vehicles and robots. “ANT® does not need any additional infrastructure, is quick to install and simple to modify, whether one has a single vehicle or a large fleet,” says Tomatis. Now, the new patent pending ANT® localization+ goes one step further with the emulation of line following and tags. It offers a valid direct substitution to inductive wires, painted lines or magnetic tape for vehicle suppliers and represents an optimal retrofitting solution

for existing installations—permitting an ideal use of the available premises.

ANT® has been used for varied range of applications in different countries, as a green tire handling with Cimcorp in Finland and North America, professional cleaning with Cleanfix and production logistics with Esatroll and Indumont in Switzerland, hospital logistics with Oppent in Italy, distribution centers with Stöcklin in Switzerland, automotive with iROB in Turkey, Optimus Robotics in France and WEWO in the Netherlands. SEP Logistik in Germany even started a complete new application with ANT® localization to track manual forklifts.

BlueBotics also has fifteen years of experience in designing custom specific solution for new applications. With the rise of service robotics, there are more and more companies that see the potential of automation, but lack the competencies to develop the automated solution for their market. That's where BlueBotics can make the difference with extremely effective robotics proficiency permitting designing and producing a prototype service robot within next four to 12 months.

In parallel to the commercial growth, BlueBotics continues keeping a watchful eye both on the emerging customers' requirements as well as on the latest technological and scientific developments at international level. This includes professional service robotics as well. “Service robotics is an emerging market where applications like cleaning and hospital logistics will soon grow with an important rate taking over the market,” says Tomatis. The company will also keep developing the navigation solution for industrial automation and engineering service, enabling new professional applications in the emerging service robotics market. **CR**

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ANT®—Autonomous Navigation Technology—makes use of the available safety laser scanners for the localization instead of requiring dedicated infrastructure like inductive wires, painted lines, magnets, or reflectors for triangulation. “This approach is today referred to as ‘natural feature navigation’,” says Tomatis. Since their foundation in 2001, BlueBotics has deliver hundreds of ANT® navigation systems around the world. With its first mover status, BlueBotics today provides a proven “natural feature navigation”, which is in operation since year 2009 in industrial