

RoDyMan: the “pizza-making” robot



The first prototype of a **robot with enhanced manipulatory skills**, which is able to perform all the stages needed to **make a pizza**, from dough kneading to brick-oven cooking, was presented by professor **Bruno Siciliano**, ordinary professor of Automatic Control at the Department of Electrical Engineering and Information Technology of the [University of Naples Federico II](#), during the info day “The future of excellence in research”, organized in Naples by the European Research Council (ERC).

RoDyMan (acronym for **Robotic Dynamic Manipulation**) is the name of the robot and also of the 5-year **research project** which received a **2.5 million euro** grant by ERC.

*“With two agile arms and multi-finger hands – explained Siciliano - RoDyMan will be able to **manipulate flexible and deformable objects**, like the food we eat, the clothes we wear and it can be used in the medical field for operating on soft tissues, including muscles and skin”.* The objective is to show that a robot can reach a dexterity levels comparable to human ones.

The heart of the project is RoDyMan’s ability to **enter relationships with human beings**. To this purpose, skills in the field of **engineering** as well as **cognitive science** and **artificial intelligence** are necessary. RoDyMan will not have legs, but it will be mounted on a wheeled **mobile platform**. The head is equipped with a **stereo camera system**, proximity and tactile **sensors**. Its **mechanical hands**, equipped with nine engines and made of aluminum and plastic materials, will be similar to human hands.

The project will be developed at [PRISMA](#) laboratory in Naples and will be jointly managed by [CREATE](#) Consortium and University Federico II.

Source ERC

Publication date 11/06/2013