Create an intelligent robotic hand, that can identify and manipulate all sorts of objects as if it were a human hand, is the ultimate goal of an ambitious European project in progress, HANDLE, incorporating a team of researchers of the Institute for Systems and Robotics (ISR), Faculty of Science and Technology, University of Coimbra (FCTUC).

Led by the University Pierre and Marie Curie in Paris, the HANDLE has a total budget of six million euros, supported by the EU under the Seventh Framework Programme and, in addition to Portugal, involving scientists from the UK, Spain and Sweden Germany and the company still robotics Shadow (London).

The scientific work of the team of Coimbra focuses on the study of perception (based on touch and sight) of objects by humans and the development of mathematical models that are used in the new generation of robotic hands, ie researchers are study all the sensory input involved in the manipulation of objects and develop sophisticated software algorithms that process all this information and reproduce the action of the human hand.

And it is precisely in the transposition into the computers of biological models of manipulation, lies the biggest challenge: "It is an explosion of complexity. The hand is an organ with a sensory-motor function of great complexity. Realize all the movements and joints of the hand
and design artificial systems that mimic, synchronized and running, is an extreme difficulty, "says the coordinator, in Coimbra, the study started a year ago, Jorge Dias.
FCTUC integrates European Consortium for creating Intelligent Robotics Hand

TVI 24 - HANDLE

Visao - Mao Robotica


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http://media.isr.uc.pt/demos/hwdvideos/uploads/mas6hzg8tddst2.flv

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