



Presse-Information Press release Communiqué de presse

"Robots and Us" – KUKA showcases innovative medical project at the 2018 European Robotics Forum

Augsburg, 28 February 2018 – Driving innovation – that is the goal of the most influential European networking event for robotics: the European Robotics Forum. From 13 to 15 March 2018, KUKA is showcasing an innovative research project from the medical sector at the ERF in Tampere, Finland.

Together with the University of Bremen and Chemnitz University of Technology, FACT Software GmbH and CAT PRODUCTION GmbH, KUKA is presenting an application for the simulation of one of the most challenging steps during an operation: implanting an artificial hip. Performing the operation in the virtual world with haptic feedback via the KUKA LBR iiwa lightweight robot is an important component in the training of future surgeons as well as in the planning stages prior to an operation.

In the simulation, presented at the ERF for the first time, the surgeon must cut the socket of a hip joint, which is difficult to teach and learn during training since this cutting requires a great deal of force and must simultaneously be carried out with great precision. Beyond this, the area to be worked on is difficult to see, with the result that operators must rely on their own perception of forces.

This is where the KUKA LBR iiwa can display its strengths: it provides the trainee with haptic feedback in order to develop a feel for forces and cutting limits. In the simulation, the required actions can be practiced as often as necessary. "Medical simulations like these can provide a very realistic feeling and thus offer optimal possibilities for training – particularly for tasks which require repeated practice or the simulation of a difficult operation," says Dr. Rainer Bischoff, Head of KUKA Corporate Research. "The exhibit is a perfect

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match for the European Robotics Forum – where the community discusses how robotics can help with the most important challenges facing society."

About the European Robotics Forum

The slogan for this year's European Robotics Forum is "Robots and Us". More than 800 experts from over 40 countries come together to exchange ideas about current topics in the field of robotics related to society and technology. The agenda includes 50 workshops with presentations and discussion forums held by leading experts from science and industry as well as politicians from all over Europe and representatives of the European Commission. At the accompanying exhibition, companies, universities and research institutes present the results of their innovative projects as well as a broad spectrum of their services.

The ERF is one of several events organized by euRobotics aisbl, an international non-profit association for all stakeholders in European robotics. The president of the association is Dr. Bernd Liepert. The ERF began in 2010 as a purely academic event and has since developed into one of the most influential and important forums, with representatives from research and industry.

Find information about the event and registration here: www.erf2018.eu

KUKA Aktiengesellschaft

KUKA is a global automation corporation with sales of around 3 billion euro and roughly 13,200 employees. As one of the world's leading suppliers of intelligent automation solutions, KUKA offers customers everything they need from a single source: from components and cells to fully automated systems for the automotive, electronics, consumer goods, metalworking, logistics/ecommerce, healthcare and service robotics industries. The Group is headquartered in Augsburg.