KUKA makes a robot that knows what it is picking up (w/ video)

June 20 2011, by Katie Gatto

(PhysOrg.com) -- Making a robot that can pick things up is not really a challenge anymore. Provided you calibrate your force sensors correctly the task is fairly simple. Making a robot that knows what it is picking up is another thing all together.

Apparently, Germany-based KUKA Robotics, is working on a bot that can do just that. Far from being humanoid the recently updated LWR +4, resembles a tall orange worm. The LWR +4 is a robot arm that has a set of visual sensors that allows the machine to analyze the substance in front of it and analyze its contents. The system makes use of a high performance camera along with vector fields and inverse kinematics to ensure that the correct item is selected every time. The robot has a total of 7 axes and weight of 16 kg.

The robot can carry a payload of up to 7 kg. The robot is also made to work with assembly tasks that require a high degree of precision, with a human link movement the system give the design a capability to work in a controlled movements with the user interface.

The LWR +4 is, of course, not the only machine that the KUKA Robotics Company has created. With the help of their partner companies, which include Jantz Canada, CertoTech and Programmable Control Systems, KUKA will be showing off the bot at the PACKEX event. The company will also be holding a seminar at the event on June 22 from 3:10 to 3:30 pm.

More information: www.kuka-robotics.com/usa/en/

© 2010 PhysOrg.com

Citation: KUKA makes a robot that knows what it is picking up (w/ video) (2011, June 20) retrieved 20 March 2024 from https://phys.org/news/2011-06-kuka-robot-video.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.