

ROBIO 2008 Plenary Talk

Industrial Robotics - Trends and Opportunities in a Changing World



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Abstract:

Industrial Robots have been populating automotive factories since the 70's, mostly seen as job killers. In the 80's, they became more accepted, and a period of co-existence between man and machine started. Today, first installations are found where robots and workers co-operate – the beginning of a trend towards real collegueship. At the same time, robots set out to conquer other industries as well, and to become part of our daily life.

The talk highlights the main trends driven by societal and environmental changes, technological achievements, and remaining challenges.

Short Bio:

Dr. Sonke Kock is Program Manager for Mechatronics and Robotics Automation in ABB Corporate Research, the global R&D organization of ABB. In this role, Dr. Kock is

responsible for long term technology planning for ABB robotic products and systems, and for managing a portfolio of strategic R&D projects. For this purpose, he is guiding 5 ABB research teams in 4 countries, and he particularly maintains the interfaces between long term and short term developments of technology in the different fields of robotics and discrete manufacturing. Dr. Kock also co-ordinates ABB relations and activities with more than 10 universities world-wide.

Previous to his current position, Dr. Kock was the manager of a research team at ABB Corporate Research in Germany, where he established a robotics lab and strong links with local customers, partners and universities.

Dr. Kock received a Ph.D. degree in Control Engineering from the Technical University of Braunschweig, Germany, in 2001, and a Master degree in Electrical Engineering from Georgia Tech, Atlanta, USA, in 1993. He was a visiting researcher at the Royal Melbourne Institute of Technology, Australia, in 1995.

Besides his managerial role, Dr. Kock is the author and co-author of 15 scientific publications and 21 patents