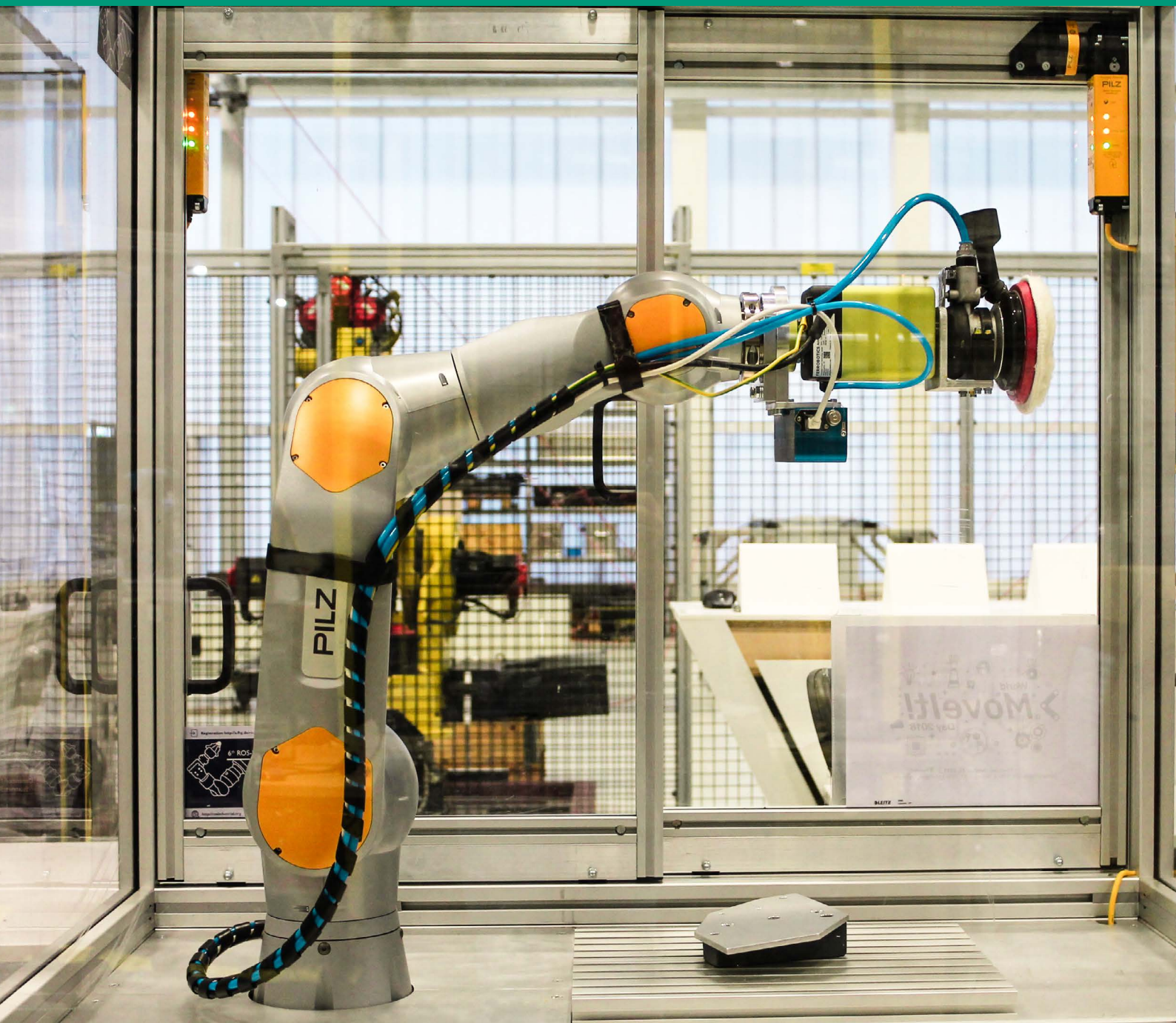
Fraunhofer IPA

ROS-INDUSTRIAL CONFERENCE 2018

December 11-13, 2018 | Stuttgart

ROS industrial



ROS-INDUSTRIAL CONFERENCE 2018
December 11-13, 2018 | Stuttgart

SESSION 1: EU ROS UPDATES
CHAIR: THILO ZIMMERMANN

TUESDAY, DECEMBER 11

11:00 Registration opens | 12:30 Lunch

13:30 **Introduction to the ROS-Industrial Conference** - Mirko Bordignon, Fraunhofer IPA

13:40 **Welcome talk: Robotics impacts Industry and Society: What are the Numbers and Trends** - Martin Haegele, Fraunhofer IPA

14:10 **ROSIN: Advancing ROS in Europe** - Carlos Hernandez Corbato, TU Delft

14:40 Break

15:10 **Experiences and Outcomes of ROS Developments** - ROSIN FTP performers, including Nobleo Projects, Roboception, Pilz, PPM Robotics AS

16:10 **Training and Education Activities** - Stephan Kallweit, FH Aachen, and Jonathan Hechtbauer, Fraunhofer IPA

16:30 Break

17:00 **Quality Assurance Initiatives and Tool Development for ROS -** Adam Alami & Zhoulai Fu, IT Univ. Copenhagen

Further Opportunities for Public funding

17:40 **RobMoSys, Composable Models and Software for Robotics Systems** - Dennis Stampfer, HS Ulm

18:05 **SeRoNet, the Service Robotics Network** - Bjoern Kahl, Fraunhofer IPA

18:30 End of Session 1 | 19:15 Social Dinner, SI-Centrum

SESSION 2: SOFTWARE & SYSTEM INTEGRATION
CHAIR: MIRKO BORDIGNON

WEDNESDAY, DECEMBER 12

09:00 **Session Keynote: Open-Source Robotics for Fun & Profit** - Dave Coleman, PickNik Consulting and MoveIt!

09:40 **System Integration and Modularity in Robotics using ROS** - Victor Mayoral Vilches, Acutronic Robotics

10:10 **Ease-of-Use Packages between ROS and ABB Robots** - Jon Tjerngren, ABB

10:30 Break

11:00 **ROS on Embedded Devices - Recent Developments** - Ingo Luetkebohle, Robert Bosch

11:30 **ROS Software Quality Assessment through Static Code Analysis and Property-Based Testing** - André Santos, INESC TEC and University of Minho

11:55 **Official ROS Support: Making the most out of the new UR e-Series** - Anders Billesoe Beck, Universal Robots

12:15 Lunch

Please be advised that photos will be taken at the conference which may or may not include your recognizable image and may be used by Fraunhofer IPA and the ROS-IndustrialConsortia. If you do not wish to have us use your image, please notify the event organizer.

SESSION 3: ROBOTICS MEETS IT
CHAIR: MARTIN HAEGELE

WEDNESDAY, DECEMBER 12

13:45 **A modular Deployment Platform for ROS modules, including Automotive Components** - Milad Geravand, Bosch Engineering

14:15 **Robotics in a Hostile World: Security, automated Maintenance and Upgrades** - Eric Jensen, Canonical

14:45 **AWS RoboMaker - Easily develop, test, and deploy Intelligent Robotics Applications** - Roger Barga, Amazon

15:15 Break

15:45 **dockeROS: Simply Running ROS Nodes in Docker Containers on Remote Robots** - Christian Henkel, Fraunhofer IPA

16:00 **Session Keynote: Robotics and Automation in the Age of the API Economy** - Henrik Christensen, UC San Diego and ROBO Global

16:40 **Google's Cloud Robotics: Helping Industries make use of Intelligent and Collaborative Automation** - Damon Kohler, Google

17:00 **Robotics meets IT Panel Discussion** - Moderator: Martin Haegele, Fraunhofer IPA ; Panelists: Henrik Christensen (UC San Diego), Oliver Goetz (SAP), Michael Grupp (magazino), Niels Jul Jacobsen (MiR), Damon Kohler (Google)

17:30 Transportation to Fraunhofer IPA for the evening program: Dinner, **demos and exhibits**, including robotic blending with Scan-n-Plan, Cloud Navigation, drag&bot, and others

SESSION 4: HARDWARE AND APPLICATION HIGHLIGHTS
CHAIR: BJOERN KAHL

THURSDAY, DECEMBER 13

09:00 **RIC Americas Highlights and Advanced Robotics for Agile Aerospace Applications** - Paul Evans, SwRI / ROS-Industrial North America

09:30 **ROS on Industrial AGVs: Perception-Driven Load Handling and PLC Interfaces** - Karsten Bohlmann, E&K Automation

10:00 **Cobotta - a ROS-Enabled Collaborative Robot by Denso** - Arun Damodaran, DENSO

10:20 Break

10:50 **Cloud Navigation: Deployment Examples** - Felipe Garcia Lopez, Fraunhofer IPA

11:10 **Session Keynote: Flexible Automotive Assembly with Industrial Co-workers** - Fabian Fuerst, Opel, and Georg Heppner, FZI

11:50 **Pilz Service Robotics Modules - ROS for Service Tasks in Industry** - Thomas Pilz, Pilz

12:20 Lunch

13:30 **The Eclipse Foundation and its Robotics Activities** - Gaël Blondelle, Eclipse Foundation Europe

14:00 **ROS-Industrial Consortium Europe 2019 Outlook**

14:30 **Discussion**

15:30 End of the event

Fraunhofer IPA

VENUE

DORMERO Hotel Stuttgart at SI-Centrum
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