



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 (provided)
- 13:30 **Introduction to the ROS-Industrial Conference** - Mirko Bordinon, 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, and others
- 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, ITU 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 Movelt!
- 09:40 **System Integration and Modularity in Robotics using ROS** - Victor Mayoral Vilches, Acutronic Robotics
- 10:10 **New Bridges 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

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 **Secure Continuous Update Workflows and Complex Software Architectures for ROS** - Eric Jensen, Canonical
- 14:45 **Cloud Navigation for AGV Cooperative Local Planning** - Kai Pfeiffer, Fraunhofer IPA
- 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
- 17:30 Transportation to Fraunhofer IPA for the evening program: **demos and exhibits**, including robotic blending with Acutronic, Cloud Navigation, drag&bot, Scan-n-Plan, and others (dinner refreshments provided)

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 **Session Keynote: Flexible Automotive Assembly with Industrial Co-workers** - Fabian Fuerst, Opel, and Georg Heppner, FZI
- 11:30 **Pilz Service Robotics Modules - ROS for Service Tasks in Industry** - Thomas Pilz, Pilz
- 12:10 Lunch
- 13:30 **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 event