

## **Annual Meeting Agenda**

## April 13-15, 2021, Virtual on the ROS-Industrial Zoom Platform

As advanced robotics becomes more tangible with regards to what can be leveraged in today's factories and beyond, it is an exciting time to be working in advanced robotics. No longer are we talking about the viability of open source in an industrial setting, but simply how do we maximize the functionality, the ease of implementation, and the optimization of the return on investment.

This year, we will be virtual, but we will have a modular program that has a little something for everyone. We will be focusing on advances around ROS2 for industry, technological and platform advances to accelerate adoption, and several success stories, while of course, maintaining the tradition of having collaboration time to influence the roadmap and seek areas of collaboration amongst the membership.

Day 1 is open to the public and features a great line up of technical updates from ROS-I Consortium members. Day 2 will feature a panel by ROS users and a chance to discuss to discuss some of the challenges in getting into ROS development. Following that will be workshops amongst the attendees and a keynote from Boeing regarding their recent open source of their industrial implementation of navigation and supporting tools. Day 3 is Demo Day, where members will get 10 minutes and via web cam demonstrate a new capability or application. Thanks for your support and looking forward to a great ROS-Industrial Consortium Annual Meeting 2021!

	Time	Торіс	Speaker	
	845	Meeting Room Opens		
	0900	Kick Off/Welcome	Matt Robinson, ROS-Industrial Consortium Americas Program Manager, SwRI	
	0910	ROS-Industrial Consortium Americas — A Year in Review	Matt Robinson, ROS-Industrial Consortium Americas Program Manager, SwRI	
	0930	ROS-Industrial Asia Pacific Updates and Developmental Updates to Easy Perception and Manipulation Deployment	Darryl Lee, Consortium Manager and Glenn Tan Development Engineer, ROS-I Consortium AP	
	0950	ROS-Industrial — New Horizons for European Open Source Robotics	Christoph Hellmann Santos, ROS-Industrial Consortium EU Program Manager, Fraunhofer IPA	
	1010	Break		
	1020	Automated Code Generation of Simulink Models as ros_control Controllers	Murat Belge, MathWorks , G.A. vd. Hoorn, CoR, Delft University of Technology	
	1040	The NIST Robotics Program With a Focus on Agility in Robotics	Dr. Craig Schlenoff, Program Manager, NIST's Measurement Science for Manufacturing Robotics Program	
	1100	ROS Utilization at the Intelligent Sustainable Technologies Division of the Georgia Tech Research Institute	Stephen Balakirsky, Chief Scientist, Aerospace, Transportation & Advanced Systems Laboratory, Georgia Tech Research Institute	
April 13	1120	Overview of the Advanced Robotics for Manufacturing Institute (ARM) what they do, the types of ROS modules they use and their successes achieved by using ROS	Arnie Kravitz, CTO, ARM Institute	
	1140	Perception-Based Collaborative Robotic Sanding with ROS1 and ROS2	Joseph Marshall and Bharath Rao, Spirit AeroSystems	
	1200	Break		
	1300	Open Robotics Update: Kinetic, Galactic, and Transition Recommendations	Katherine "Kat" Scott, Developer Advocate, Open Robotics	
	1320	A ROS2 Driver for Universal Robots	Andy Zelenak, Senior Controls Engineer, PickNik Robotics	
	1340	Towards Autonomous Industries: ROS++	Atul Hatalkar, Principal Engineer — Robotics, Intel	
	1400	Using ROS2 with the Mixed Reality Toolkit to develop AR and VR applications for Robotics	Lou Amadio, Principal Software Development Lead Azure Edge Robotics Team, Microsoft	
	1420	Break		
	1430	Robotics Security Kickstart	Sid Faber, Canonical	
	1450	Call to Action for Robotics Education	Jack Reilly, AWS	
	1510	Multi-Machine Multi-Robot Interoperability	Dr. Michael Jaentsch, Siemens	
	1530	PHARAOH: An English-language procedure-based application framework for full or semi-autonomous robot operations	Dr. Robert Burridge, TracLabs	



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	0845	Meeting Room Opens/Welcome	Matt Robinson, ROS-Industrial Consortium Americas Program Manager, SwRI
	0900	ROS-Industrial Consortium Americas Consortium Member Update	Matt Robinson, ROS-Industrial Consortium Americas Program Manager, SwRI
	0930	Panel: Getting Into ROS Application Development	Shaun Edwards, CTO, PlusOne Robotics, Akash Jinandra, Lead Robotics Systems Engineer, Bastian Solutions, Justin Kinney, Technical Manager Robotics and Mechatronics, NOV
Ar	1000	Workshop — Feedback on Areas of Need — Prioritization and Gaps	Moderators: Levi Armstrong, SwRI, Matt Robinson, SwRI, and Josh Langsfeld, SwRI
April 14	1200	Break	
4	1300	Member Share: Needs within the Steel Foundry Industry	David Poweleit, Manager, Steel Founders' Society of America
	1330	ROS Workbench	Levi Armstrong, ROS-I Tech Lead, SwRI
	1350	Member Keynote: Boeing's Open Source Journey Towards Robust Factory Mobility for Mobile Manipulation	Martin Szarski, William Ko, Boeing
	1420	Break	
	1430	Focused Technical Project Workshop	Moderated by Matt Robinson, ROS-Industrial Consortium Americas Program Manager, SwRI

	Time	Topic	Speaker
April 15 – Demo Day	0845	Meeting Room Opens/Welcome	Matt Robinson, ROS-Industrial Consortium Americas Program Manager, SwRI
	0900	Introduction	Matt Robinson, ROS-Industrial Consortium Americas Program Manager, SwRI
	0910	Demonstrations!	Rensselaer Polytechnic Institute, University of Texas at Austin — Nuclear Robotics Group, Microsoft, PushCorp, SwRI, and more

## Registration

Please be sure to register: <a href="https://rosindustrial.org/virtual-ricamericas-annual-meeting-registration">https://rosindustrial.org/virtual-ricamericas-annual-meeting-registration</a>

We will also be updating the event information over at the website so be sure to check back for additional details. We will add detailed lists of the demonstrations that will be showcased, and which organization is providing them.

The ROS-Industrial Consortium is a membership organization. The meeting is free to dues-paying members

Additional members may attend for \$50/EA. For more information, please contact:

## **Matt Robinson**

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http://rosindustrial.org/events-summary/

