

Program ARW 2015

Thursday - May 7th

Start	End	Event	Authors
08:55	09:00	Welcome (Bernhard Rinner)	
09:00	10:00	Keynote: Sabine Hauert (Session Chair: Christian Bettstetter)	
10:00	10:30	Session I (Session Chair: Saeed Yahyanejad)	
10:00	10:15	Graz Griffins' Solution to the European Robotics Challenges 2014	Jesús Pestana, Rudolf Pretenthaler, Thomas Holzmann, Daniel Muschick, Christian Mostegel, Friedrich Fraundorfer and Horst Bischof
10:15	10:30	Coordination of an Autonomous Fleet	Markus Bader, Andreas Richtsfeld, Markus Suchi, George Todoran, Markus Vincze and Wolfgang Kastner
10:30	11:00	Coffee break	
11:00	12:30	Session II (Session Chair: Alessandro Gaspardo)	
11:00	11:15	Coordination in Micro Aerial Vehicles for Search Operations	Asif Khan and Bernhard Rinner
11:15	11:30	Adaptive Feed Forward Control of an Industrial Robot	Dominik Kaserer, Matthias Neubauer, Hubert Gattringer and Andreas Müller
11:30	11:45	Action Recognition for Industrial Applications using Depth Sensors	Sharath Chandra Akkaladevi, Christoph Heindl, Alfred Angerer and Juergen Minichberger
11:45	12:00	Gesture Control for an Unmanned Ground Vehicle	Robert Schwaiger and Mario Grotschar
12:00	12:15	Prediction of the RAF Orientation Error Limits based on the Interval Analysis Method	Youssef Chouaibi, Ahmed Hachem Chebbi, Zouhaier Affi and Lotfi Romdhane
12:15	12:30	Multi-Hop Aerial 802.11 Network: An Experimental Performance Analysis	Samira Hayat and Evsen Yanmaz
12:30	14:00	Lunch	
14:00	15:30	Session III (Session Chair: Aleš Ude)	
14:00	14:15	Realtime Control of Absolute Cartesian Position of Industrial Robot for Machining of Large Parts	Diego Boesel, Philipp Glocker, José Antonio Dieste and Victor Peinado
14:15	14:30	Automatic Coverage Planning System for Quality Inspection of Complex Objects	Michael Hofmann, Markus Ikeda, Jürgen Minichberger, Gerald Fritz and Andreas Pichler
14:30	14:45	Skill Adaptation through combined Iterative Learning Control and Statistical Learning	Miha Deniša, Andrej Gams and Aleš Ude
14:45	15:00	Processing Tracking Quality Estimations in a Mixed Local-Global Risk Model for Safe Human Robot Collaboration	Frank Dittrich and Heinz Woern
15:00	15:15	Evaluation of Different Importance Functions for a 4D Probabilistic Crop Row Parameter Estimation	Georg Halmetschlager, Johann Prankl and Markus Vincze
15:15	15:30	Towards Safe Human-Robot Collaboration: Sonar based Collision Avoidance for Robot's End-Effector	Sriniwas Chowdhary Maddukuri, Martijn Rooker, Jürgen Minichberger, Christoph Feyrer, Gerald Fritz and Andreas Pichler
15:30	15:40	30'' Madness (Posters and Demos)	
		Adaptive Video Streaming for UAV Networks	Severin Kacianka and Hermann Hellwagner
		Development of the Robotic Arm for Grabbing a Bottle and Pouring Liquid in to a Cup, controlled using LabVIEW	Sudeep Sharan, Ketul Patel, Robert Michalik, Julian Umansky and Peter Nauth
		Performance Evaluation of a Cognitive Robotic System	Sharath Chandra Akkaladevi and Christian Eitzinger
		Using Ultrasonic Signals for Pedestrian Detection in Autonomous Vehicles	Andreas H. Pech and Peter M. Nauth
		A Low-cost mini Robot Manipulator for Education purpose	Mohamed Aburaia
		Placing the Kinematic Behavior of a General Serial 6R Manipulator by Varying its Structural Parameters	Mathias Brandstötter and Michael Hofbauer

	Autonomous Multi-Robot Exploration	Micha Rappaport and Torsten Andre	
	An Autonomous Multi-UAV System for Search and Rescue	Jürgen Scherer, Saeed Yahyanejad, Samira Hayat, Torsten Andre, Pasquale Grippa	
	Interface for Capacitive Sensors in Robot Operating System	Stephan Mühlbacher-Karrer, Wolfram Napowanez, Hubert Zangl, Michael Moser and Thomas Schlegl	
	Bio Rob - The 3rd Hand	Helmut Staudinger Christer	
15:40	16:40	Demo and Poster session + Coffee break	
16:40	17:40	Session IV (Session Chair: Michael Hofbaur)	
16:40	16:55	Object Tracking by Combining Supervised and Adaptive Online Learning through Sensor Fusion of Multiple Stereo Camera Systems	David Spulak, Richard Otrebski and Wilfried Kubinger
16:55	17:10	Network Connectivity in Mobile Robot Exploration	Torsten Andre, Giacomo Da Col and Micha Rappaport
17:10	17:25	A Smart Real-Time Anti-Overturning Mechatronic Device for Articulated Robotic Systems operating on Side Slopes	Renato Vidoni, Giovanni Carabin, Alessandro Gasparetto and Fabrizio Mazzetto
17:25	17:40	3D Surface Registration on Embedded Systems	Matthias Schörghuber, Christian Zinner, Martin Humenberger and Florian Eibensteiner
17:40	18:10	Introduction to GMAR Fachbereich Robotik	Markus Vincze
18:45		Dinner + Best Paper	

Friday - May 8th

08:30	09:30	Keynote: Werner Huber (Session Chair: Christian Bettstetter)	
09:30	11:00	Session V (Session Chair: Gerald Steinbauer)	
09:30	09:45	Interface for Capacitive Sensors in Robot Operating System	Stephan Mühlbacher-Karrer, Wolfram Napowanez, Hubert Zangl, Michael Moser and Thomas Schlegl
09:45	10:00	An Autonomous Multi-UAV System for Search and Rescue	Jürgen Scherer, Saeed Yahyanejad, Samira Hayat, Evsen Yanmaz, Torsten Andre, Asif Khan, Vladimir Vukadinovic, Christian Bettstetter, Hermann Hellwagner and Bernhard Rinner
10:00	10:15	Local SLAM in Dynamic Environments using Grouped Point-Cloud Tracking. A Framework	George Todoran, Markus Bader and Markus Vincze
10:15	10:30	UAV-based Multi-spectral Environmental Monitoring	Thomas Arnold, Martin De Biasio, Andreas Fritz and Raimund Leitner
10:30	10:45	Autonomous coordinated Flying for Groups of Communications UAVs	Myra Wilson, Alexandros Giagkos, Elio Tuci and Phil Charlesworth
10:45	11:00	Intelligent Automated Process: a Multi Agent Robotic Emulator	Alessandro Gasparetto, Renato Vidoni and Paolo Boscaroli
11:00	11:30	Coffee break	
11:30	12:30	Session VI (Session Chair: Hubert Zangl)	
11:30	11:45	Laser Range Data Based Room Categorization Using a Compositional Hierarchical Model of Space	Peter Ursic, Ales Leonardis, Danijel Skocaj and Matej Kristan
11:45	12:00	The future of In-House Transports	Christoph Zehentner, Verena Kriegl
12:00	12:15	Autonomous Charging of a Qadcopter on a Mobile Platform	Anže Rezelj and Danijel Skočaj
12:15	12:30	An Autonomous Forklift for Battery Change in Electrical Vehicles	Stefan Kaltner, Jürgen Gugler, Manfred Wonisch and Gerald Steinbauer
12:30	12:35	Final words	