

FREE ADMISSION TO THE CONFERENCE! - <http://www.car.upm-csic.es/events/roboCity16/>



PLENARY TALKS



May, 26th, 2016
Alin Albu-Schäffer, Institute of Robotics and Mechatronics
Soft-Robotics – A Paradigm for Interaction with Humans and Unknown Environments



May, 27th, 2016
Javier Minguez, Bitbrain Technologies
Neurotechnology: foundations, current applications and trends

TECHNICAL SESSIONS

#	n° SESSION	SESSION TITLE	PAPERS TITLE	AFFILIATION
1	Technical session 1	Assistive and Rehabilitation Robotics	Development of a Brain-Computer Interface, Based on emotions for the control of robotics applications	CAR-UPM
2			Kinematic and Kinetic Simulation of Upper Brachial Plexus Injury in the Arm Rotation	CAR-UPM
3			A Pilot Study on the Design Considerations and User Impressions of an Assistive Affordable Device	UC3M
4			Modelling and Simulation of Servomotors for a Rehabilitation Exoskeleton	CAR-UPM
5			Shoulder Exoskeleton for Rehabilitation Actuated with Shape Memory Alloy	UC3M
6	Technical session 2	Telerobotics and Remote Handling	Vision Driven Control of Robots: Review for Future Applications in CERN Accelerators Harsh Environments	CAR-UPM, CERN
7			Comparison Between a Hybrid Rate-position Control and Other Methods in a Large Workspace Telemanipulation Task	CAR-UPM
8			Graphical User Interfaces for Robotic Systems in Hazardous Facilities	Universitat Jaume I; CERN
9			A Modular Passivity Framework for Multilateral Teleoperation Applications	DLR; CAR-UPM
10			Haptic Handed System Design and Development for Virtual Reality	CAR-UPM
11	Technical session 3	Computer Vision and Image Processing - 1	People Positioning System With Low Cost 3D Cameras and Wireless Devices for Indoor Environments	UNED; Heriot-Watt University
12			Visual Odometry Correction Based on Loop Closure Detection	UAH
13			Object Perception Applied to Daily Life Environments for Mobile Robot Navigation	UC3M
14			3D Object Recognition and Pose Estimation Using VFH Descriptors	UAH
15			Inertial-Vision Odometry on Mobile Devices	CINVESTAV-mex
16	Technical session 4	Computer Vision and Image Processing - 2	A New Generation of Entertainment Robots Enhanced with Augmented Reality	UC3M
17			Comparison of Color-Based and Depth-Based Vision Techniques in Surface Detection for Hand Tracking	CAR-UPM
18			Web Technologies in JdeRobot Framework for Robotics and Computer Vision	URJC
19			Stereovision Matching Based on Combining Neural Networks for Outdoor Images	UNED; INIA; UCM
20			Analysis of Haptic Resolution on Torso for Thermal and Vibrotactile Actuators in a Virtual Reality Vest	CAR-UPM
21	Technical session 5	Humanoid Robotics	New Trends and Challenges in the Automatic Generation of New Tasks for Humanoid Robots	UC3M
22			Humanoid Robots for Underwater Works	CAR-UPM
23			Cable Driven Robot to Simulate Low Gravity and its Application in Underwater Humanoid Robots	CAR-UPM
24			Walker Robot: Advances in Humanoid Robot Research at UC3M	UC3M
25			Manipulation Balance Control System by Computer Vision Tools	UC3M
26	Technical session 6	Human Robot Interaction	Movids: First Steps Toward Help the Mobility of People With Visual Disability in Panama	CAR-CSIC; UTP; pan
27			Facial Expressions and Voice Control of an Interactive Robot	CAR-UPM
28			Towards Complex Human Robot Cooperation Based on Gesture-Controlled Autonomous Navigation	CAR-UPM
29			A Review on How to Easily Program Robots at High School	UC3M
30			Towards A Teleoperated System Based on Electronic Nose for Odors Tracking: First Prototype	CAR-UPM
31	Technical session 7	Localization, mapping and navigation	A Topological Navigation System Based on Multiple Events for Usual Human Environments	UC3M
32			UGV Navigation in ROS Using Lidar 3D	UAH
33			Pedestrian Motion Prediction: A Graph Based Approach	CAR-UPM
34			Path Planning on Mars Using VFM	UC3M
35			A Crop Inspection Vehicle Based on a Battery-Powered Electric Car	CAR-CSIC
36	Technical session 8	Multirobot systems Swarm robotics	"Should I Stay Or Should I Go?" - Enabling Autonomous Mobile Devices to Optimize Data Collection Performance	UC3M; NEC
37			Multiple Robots, Single Operator: Considerations About Information and Commanding	CAR-UPM
38			A Development Platform for the Evaluation and Validation of Algorithms for Self-Organization in Hybrid Swarms	NEC; UC3M
39			Detecting, Localizing and Following Dynamic Objects with a Mini-UAV	CAR-UPM
40			Future Trends in Perception and Manipulation for Unfolding and Folding Garments	UC3M
41	Technical session 9	New mechanism design Tactile and haptics devices	Hybrid Connector Design for Modular Robots	CAR-UPM
42			Cascade Control of the PUMA 560 Using Simulink and Arduino	U de León
43			Grabbing Objects Through a Robotic Arm and Hand in a Safety Way	UAH
44			Electromechanical Design of a Humanoid Robotic Hand	CAR-UPM

ENTREPRENEURIAL ACTIVITIES

ROBOTIZE YOUR IDEA

¡Buscamos nuevas ideas en robótica!

- Para apuntarse: 100 palabras, 1 imagen (voluntaria).
- En el evento: 3 minutos de presentación con una sola transparencia.
- Un premio por cada una de las 4 categorías: Maker Kit Arduino valorado en más de 80 euros (patrocinado por BricoGeek).
- Categorías: servicio/salud, industria/construcción, aeroespacial/seguridad, educación/entretenimiento (propuestas de otras áreas las encajaremos en las anteriores).



¡ENTRADA LIBRE! / FREE ADMISSION!

BROKERAGE EVENT

¡Buscamos espíritus robóticos emprendedores!

- Networking y asesoramiento por parte de entidades de inversión en I+D y grandes empresas del sector.
- Premio emprendedor a la mejor iniciativa de cada sector entregado por la revista Emprendedores.
- Inscripción: al inscribirse a RoboCity16 marcar casilla Brokerage event e incluir nombre y url de entidad.
- Sectores:



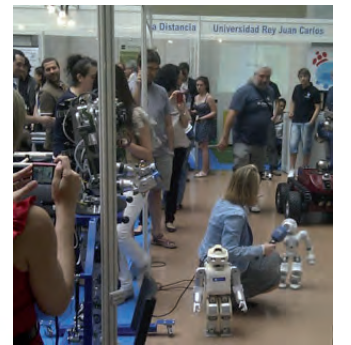
Premio RS Components a la Iniciativa con mayor potencial de crecimiento empresarial: 1.500 € en productos RS.



*Para personas entre 0 y 99 años ;-)



EXHIBITION



WORKSHOPS

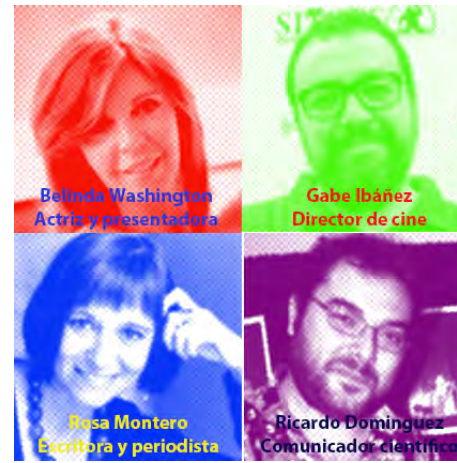
WS1: Government involvement in robotics

- Raul Marin, Sección nuevas tecnologías, Ayuntamiento de Leganés
- Fernando Herrero, Subdirector General de Innovación y Ciudad Inteligente, Ayuntamiento de Madrid
- Fermin Montero, Subdirector General de Innovación y Promoción Empresarial, Comunidad de Madrid
- Enrique Pelayo, CDTI, Directorate of international programs
- José Ignacio Pradas Poveda, Secretaria General de Ciencia, Tecnología e Innovación, MINECO
- Carlos Toledo, CDTI, Directorate of promotion and cooperation



WS2: Robotics, arts and culture (May 26th, 2016)

- Belinda Washington, actress and presenter
- Gabe Ibañez, film director
- Rosa Montero, writer and journalist
- Ricardo Dominguez, ROS Film Festival Director



WS3: Educational robots

- José María Sánchez Echave, Deputy director of in-service teacher training, Community of Madrid
- Victor Gallego, head of Robocampeones association
- Félix Rodríguez Cañadillas, CREA Robotica Educativa (spin-off of RoboCity2030), CEO
- Jesús Fernández, LEON3D, CEO



WS4: Robotics innovation (HispaRob)

- Lia García Pérez, LOGIX 5 (Robótica Educativa)
- José de Lara, GRUPO AID (Robótica Marítima)
- Jordi Ribatallada, ABB (Robótica Colaborativa)
- Jorge Gutiérrez Riego, Drone Tools (Robótica Aérea)
- Juan Carlos Llorente, GMV (Robótica Seguridad y Defensa)
- Carmen Pérez, TECNATOM (Robótica Industrial)
- Eduardo Zalama, CARTIF (Robótica Médica y Asistencial)



WS5: Safety in collaborative robot applications (May 27th 2016)

- Miquel López, Director Técnico de KUKA Robots IBERICA S.A.



WS6: Entrepreneurship in robotics (May 27th 2016)

- Renaud Champion, Primnext, CEO; director of euRobotics
- Diego Fernandez, Arquimea (spin-off from RoboCity2030), CEO
- Cecilia García, Aura Innovative Robotics (spin-off from RoboCity2030)
- Jon Agirre, Tecnalia



WS7: Societal aspects of robotics (May 27th, 2016)

- Migle Laukyte, CONEX experienced fellow in AI and Law, UC3M
- Antonio López, catedrático en trabajo social y servicios sociales, UNED
- Jesús R. Mercader, catedrático de derecho del trabajo, UC3M
- Antonio Rodríguez de las Heras, catedrático de historia contemporanea, UC3M



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