

Slot	September 5, 2024 (Thursday)	September 6, 2024 (Friday)
8:45	Credentials Pick-up	
9:15	Welcome Session	
9:30	Session 1 – Computer Vision	Session 5 – Intelligent Robots II
10:30	Coffee Break	
11:00	Plenary I - Fundamental Challenges in Deploying Autonomous Systems in Industrial and Urban Environments. Eduardo Nebot.	Session 6 – Cognitive Robots I
12:00	Session 2 – Intelligent Robotics I	Session 7 – Cognitive Robots II
13:00	Lunch Break	
14:00	Plenary II - Spotting robots: toward scene understanding and dynamic object interactions. Zuria Bauer.	
14:30	Session 3 – Machine Learning	
15:30	Coffee Break	
16:00	Session 4 – Social Robotics	
17:00	REDAF Meeting	
18:00	Social – Santa Barbara Castle	
20:30	Dinner: Restaurante Poniente	

Session 1 – Computer Vision. Chaيمان: Francisco Gómez Donoso

Imitation Learning for vision based Autonomous Driving with Ackermann cars.
Alejandro Moncalvillo, José-María Cañas-Plaza, Sergio Paniego, Roberto Calvo and Abdulla Al-Kaff

Impact of Real time on Active Perception Systems applied to Social Robotics.
Antonio Alberto García Gómez-Jacinto, Juan Diego Peña Narvaez, Rodrigo Pérez Rodríguez, José Miguel Guerrero, Francisco Martín Rico and Juan Carlos Manzanares Serrano

Integration of a Sign Language Interface in a Socially Assistive Robot.
Sohaila Chtioui Bouhou, Alberto J. Tudela, José Galeas, Óscar Pons, Antonio Bandera and Adrián Romero-Garcés.

Session 2 – Intelligent Robotics I. Chaيمان: Félix Escalona

Defining a Standard Blockchain-based Black Box for Autonomous Systems.
Laura Inyesto-Alonso, David Sobrín-Hidalgo, Claudia Álvarez-Aparicio, Adrián Campazas-Vega, Ángel M. Guerrero-Higueras and Vicente Matellán-Olivera.

Formalizing a Social Navigation Use Case in PDDL.
Camino Rodríguez, Alba Gragera, José Galeas, Pablo Bustos, Ángel García-Olaya and Fernando Fernández

Quadrupeds Robots in Herding: Metrics for Experimental Validation of Animal-Robot Interactions.
Beatriz Jové, Alexis Gutiérrez, Camino Fernández-Llamas, Lidia Sánchez-González, Francisco Javier Rodríguez-Lera and Vicente Matellán Olivera

Session 3 – Machine Learning. Chaيمان: Vicente Matellán

People detection on 2D laser range finder data using deep learning and machine learning.
José Abrego-González, Eugenio Aguirre and Miguel García-Silvente.

Discrete Active Inference with Dynamic Scene Graphs.
Pablo Lanillos and Pablo Bustos.

Analysis of strategies to apply federated learning in the field of robotics.
Roi Martínez Enríquez, Nicolás Fraga Corredoira, José Miguel Burés Amatriain, Roberto Iglesias Rodríguez,
Francisco Javier García Polo and Xosé Ramón Fernández Vidal

Session 4 – Social Robotics. Chaiman: José María Cañas

PAWS: Personal Assistance Walking System for the Visually Impaired.
Carmen Losantos-Pulido, Francisco Gomez-Donoso, Felix Escalona and Miguel Cazorla.

Re-engineering EBO: Advancing Social Robotics for Enhanced Care.
Sergio Eslava Velasco, Alejandro Torrejón Harto and Pedro Nuñez Trujillo.

Multimodal Emotional Recognition for Human-Robot Interaction in Social Robotics.
Sergio García-Muñoz, Sergio Suescun-Ferrandiz, Francisco Gomez-Donoso and Miguel Cazorla.

Session 5 – Intelligent Robotics II. Chaiman: Pablo Bustos

Enhanced Robot Navigation in a Cyber-Physical System-of-Systems Architecture.
Alberto J. Tudela, José Galeas, Óscar Pons, Juan Pedro Bandera and Antonio Bandera.

Lightweight Automated Vehicle Simulator for Studying Drivers Reactions in Real Scenarios.
Mohammed Bendahmane and Lluís Ribas-Xirgo

Session 6 – Cognitive Robotics I. Chaiman: Ismael García

Upgrading the cognitive architecture of a robot to become socially aware.
Jose Galeas, Pedro Núñez, Alberto Tudela, Antonio Jerez, Óscar Pons and Juan Pedro Bandera Rubio

CORTEX as an Enabler of Multi-platform Integration in Internet of Robotics Things ecosystems.
Alberto J. Tudela, José Galeas, Óscar Pons, Carlos Madrid, Sara Aguilera, Pablo Gómez, Juan Pedro Bandera,
Antonio Bandera and Pablo Bustos

Enhancing Cognitive Therapies for Older Adults with EBO: An Autonomous Social Robot System
Integrating LLMs and Therapist-in-the-Loop.
Antonio Blanco Castillo, Jackie Lee Chong Ojeda, Alicia Condón Pérez and Pedro Miguel Núñez Trujillo.

Session 7 – Cognitive Robotics II. Chaiman: Francisco Martín Rico

Graph-based inner state prediction for a socially aware robot.
Jose Tejón Moreno, Juan Pedro Bandera, Antonio Bandera and Adrián Romero-Garcés

On the use of ontologies as knowledge source for social robots the INSIGHT research project.
Jesus Martinez-Gomez, Ismael García-Varea, M. Julia Flores, Luis de la Ossa, Javier Ballesteros-Jerez, Antonio
Bandera, Rebeca Marfil, Pilar Bachiller and Pablo Bustos