

## Llista de Contribucions

La llista de contribucions està agrupada en sessions temàtiques i organitzada entre presentacions orals i pòsters.

### Presentacions Orals

#### Session on Logic, Satisfiability, Fuzzy Sets

37. Clause Branching in MaxSAT and MinSAT.  
*Josep Argelich, Chu-Min Li, Felip Manyà and Joan Ramon Soler*
47. DeciMaxSum: Using Decimation to Improve Max-Sum on Cyclic DCOPs.  
*Jesus Cerquides, Rémi Emonet, Gauthier Picard and Juan A. Rodríguez-Aguilar*
22. Style painting classifier based on Horn clauses and Explanations (SHE).  
*Vicent Costa, Pilar Dellunde and Zoe Falomir*
16. A lattice structure for the set of interval-valued fuzzy-qualitative labels.  
*Francesc Prats, Mónica Sánchez and Núria Agell*

#### Session on Classifiers, Networks and Machine Learning

4. The Effect of Space-Time Representation Learning in Predicting People's Next Location.  
*Abdulrahman Al-Molegi and Antoni Martínez Ballesté.*
54. Quaternion Phase CNN.  
*E. Ulises Moya-Sánchez, Sebastian Colores, Abraham Sánchez and Ulises Cortés.*
9. Towards a Universal Neural Network Encoder for Time Series.  
*Joan Serrà, Santiago Pascual and Alexandros Karatzoglou*
19. Determining Classic versus Modern Style in Fashion.  
*Javier Tauste, Miguel Angel González, Lledó Museros, Ismael Sanz, Dolores Llidó and Luis Gonzalez-Abril.*

#### Session on Data Science, Recommender Systems and Case-based Reasoning

8. A method to integrate semantic criteria into a recommender system based on ELECTRE outranking relations.  
*Sílvia Buira and Aida Valls*

55. Web pattern navigation profiling for online marketing campaigns design support under a data science approach.  
*Arturo Palomino and Karina Gibert*
28. *Feature-Tree Labeling for Case Base Maintenance.*  
*Nariman Nakhjiri, Maria Salamó and Miquel Sànchez-Marrè*
43. On the analysis of utility and risk for masked data in big data: a small data analysis.  
*Vicenç Torra*

### **Session on Natural Language and Sound Processing**

26. An Argumentation Approach for Agreement Analysis in Reddit Debates.  
*Teresa Alsinet, Josep Argelich, Ramón Béjar and Santi Martínez*
41. Tweet sentiment visualization and classification using manifold dimensionality reduction.  
*Francisco Grimaldo, Emilia López-Iñesta, Juan José Garcés-Iniesta, Juan Gómez-Sanchis, Daniel García-Costa, Eusebio Marqués-Benítez and Emilio Soria-Olivas*
13. N-Channel Convolutional Neural Networks for Irony Detection in Twitter.  
*Mohammed Jabreel, Najlaa Maarroof, Ammar Acran and Antonio Moreno*
5. Enhancing Text Spotting with a Language Model and Visual Context Information.  
*Ahmed Sabir, Francesc Moreno-Noguer and Lluís Padró.*

### **Session on Computer Vision and Cognitive Agents**

30. CuisineNet: Food Attributes Classification using Multi-scale Convolution Network.  
*Md. Mostafa Kamal Sarker, Mohammed Jabreel, Hatem A. Rashwan, Syeda Furraka Banu, Vivek Kumar Singh, Antonio Moreno, Petia Radeva and Domènec Puig*
33. Retinal Optic Disc Segmentation using Conditional Generative Adversarial Network.  
*Vivek Kumar Singh, Hatem A. Rashwan, Farhan Akram, Nidhi Pandey, Md. Mostafa Kamal Sarker, Adel Saleh, Saddam Abdulwahab, Najlaa Maarroof, Jordina Torrents Barrena, Santiago Romani and Domènec Puig*
46. An approach to Gait Analysis from Human-Rollator Interaction: The i-Walker.  
*Atia Cortés, Maribel Ojeda, Javier Béjar and Antonio B. Martínez*
39. Sentient Embodied Conversational Agents: Architecture and Evaluation.  
*Dolça Tellols, Maite Lopez-Sanchez, Inmaculada Rodriguez and Pablo Almajano*

# Pòsters

## Sessió 1

### Cognitive Systems and Agents

53. What is the Physics of Intelligence?.  
*Xerxes D. Arsiwalla, Camilo M. Signorelli, Jordi-Ysard Puigbò, Ismael T. Freire and Paul Verschure*
11. Using wearable sensors to detect workload on driving simulated scenarios.  
*Víctor Corcoba, Zoe Falomir and Nourelhoda Mohamed*
44. Limits of Multi-Agent Predictive Models in the Formation of Social Conventions.  
*Ismael T. Freire, Xerxes D. Arsiwalla, Jordi-Ysard Puigbò and Paul F. M. J. Verschure*
17. Cognitive Architecture: the key to AI-Based Digital Transformation in Organizations.  
*Karla Olmos-Sánchez and Jorge Rodas-Osollo*
45. Loss aversion fosters coordination in independent reinforcement learners.  
*Marco Jerome Gasparrini, Martí Sánchez-Fibla*

### Data Science, Recommender Systems and Case-based Reasoning

27. Big Data Analytics for Obesity Prediction.  
*Ahsan Bilal, Alfredo Vellido and Vicent Ribas*
38. A Study on Contextual Influences on Automatic Playlist Continuation.  
*Anna Gatzoura, Miquel Sànchez-Marrè and Alípio Mário Jorge*
29. eXiT\*CBR: a tool supporting RRI.  
*Beatriz López and Carles Pous*
56. Including Hard Restrictions into Diet4You Menu Planner.  
*Beatriz Sevilla-Villanueva, Karina Gibert and Miquel Sànchez-Marrè*
49. On Boolean algebras of conditionals and probabilities of conditionals.  
*Tommaso Flaminio, Lluís Godó and Hykel Hosni*

### Natural Language and Sound Processing

15. Do Positive Twitter Messages Have Impact on Stock Liquidity?.  
*Aliasghar Abdirahmani and Cecilio Angulo*

52. A new algorithm for speech enhancement based on multivariate empirical mode decomposition.  
*Pere Marti-Puig, Esteve Gallego-Jutglà, Gerard Masferrer and Jordi Solé-Casals*
25. Classifying and Generalizing Successful Parameter Combinations for Sound Design.  
*Iván Paz, Àngela Nebot, Francisco Múgica and Enrique Romero*
3. A Visual Distance for WordNet.  
*Raquel Pérez-Arnal, Armand Vilalta, Dario Garcia-Gasulla, Ulises Cortés, Eduard Ayguadé and Jesus Labarta*

## **Sessió 2**

### **Classifiers, Networks and Machine Learning**

1. Towards Detecting Structures in Computational Astrophysics Plasma Simulations: using Machine Learning for Shock Front Classification.  
*Carmen Aloy Torás, Petar Mimica and Marcelino Martínez Sober*
18. Complex Network Multiresolution for Optimal Sensor Placement in Big Urban Infrastructures.  
*Manuel Herrera, Robert Wright, Carlo Giudicianni, Armando di Nardo and Joaquín Izquierdo*
10. Go with the Flow: Recurrent Networks for Wind Time Series Multi-Step Forecasting.  
*Jaume Manero, Javier Béjar and Ulises Cortés*
24. Sorting Hams using Bagged Decision Trees in a commercial pig slaughterhouse.  
*Gerard Masferrer, Ricard Carreras, Pere Marti-Puig and Moises Serra*
36. A Fuzzy Learning Method to Segment Visitors of a Tourist Attraction.  
*Jennifer Nguyen, Albert Armisen, German Sánchez-Hernández, Núria Agell and Cecilio Angulo*
2. Measuring distances between medical entities. Step 1: DrugBank.  
*Alberto Olivares-Alarcos, Iva Stankovic, Humberto González and Horacio Rodríguez*
51. Unsupervised Systems-Level Learning Mechanism Based on Bayesian-Inference.  
*Jordi-Ysard Puigbò, Xerxes D. Arsiwalla and Paul Verschure*

## Computer Vision and Robotics

23. Brain MR Image Segmentation Using Multiphase Active Contours Based on Local and Global Fitted Images.  
*Farhan Akram, Vivek Kumar Singh, Md. Mostafa Kamal Sarker, Miguel Angel Garcia and Domènec Puig*
48. Hybr-iT Project: Initial Steps Towards Contextual Robotic Manipulation for Human-Robot Teams in Industrial Environments.  
*José de Gea Fernández, Nils Niemann, Sebastian Stock, Martin Günther, Dennis Mronga, Hendrik Wiese, Elsa Kirchner, Stefan Stiene*
32. Considering the Anchoring Problem in Robotic Intelligent Bin Picking.  
*Diego Escudero-Rodrigo and René Alquézar*
31. Vehicle Pose Estimation using G-Net: Multi-Class Localization and Depth Estimation.  
*Javier García López, Antonio Agudo and Francesc Moreno-Noguer*
7. Foreground detection in a multi-target fish tracking from video-recordings using U-net based architecture.  
*Ramon Reig-Bolano, Moises Serra i Serra and Pere Marti-Puig*
40. On Improving Breast Density Segmentation using Conditional Generative Adversarial Networks.  
*Nasibeh Saffari, Hatem A. Rashwan, Blas Herrera and, Santiago Romani, Meritxell Arenas and Domènec Puig*