

# 2021

## Report of Research Group

### Published articles

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María N. Moreno García, **Context-Aware Music Recommender System Based on Automatic Detection of the Users Physical Activity**. *Distributed Computing and Artificial Intelligence, 17th International Conference. Advances in Intelligent Systems and Computing.*, 1237, pp. 142-151, 2021.

Sergio Miguel Tomé, **The Heuristic of Directional Qualitative Semantic: A New Heuristic for Making Decisions about Spinning with Qualitative Reasoning**. *Robotics*, 10(1), pp. 17-, 2021.

María N. Moreno García, **Using hybrid deep learning models of sentiment analysis and item genres in recommender systems for streaming services**. *electronics*, 10, pp. 2459-, 2021.

María N. Moreno García, **Context-Aware Recommender Systems in the Music Domain: A Systematic Literature Review**. *Electronics*, 10, pp. 1555-, 2021.

María N. Moreno García, **Hybrid Deep Learning Models for Sentiment Analysis**. *Complexity*, 2021, pp. 9986920-, 2021.

María N. Moreno García, **Selecting the Suitable Resampling Strategy for Imbalanced Data Classification Regarding Dataset Properties**. *Applied Sciences*, 11, pp. 8546-, 2021.

María N. Moreno García, **An Approach to Integrating Sentiment Analysis into Recommender Systems**. *Sensors*, 21, pp. 5666-, 2021.

Vivian López Batista, M<sup>a</sup> Dolores Muñoz Vicente, María N. Moreno García, **Dynamic inference of user context through social tag embedding for music recommendation**. *arXiv*, 2109, pp. 11231-, 2021.

Sergio Miguel Tomé, **Broadening the definition of a nervous system to better understand the evolution of plants and animals**. *Plant Signaling & Behavior*, 10, pp. 192756-, 2021.

### Books

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María N. Moreno García, **Information Retrieval and Social Media Mining**. *MDPI*, 978-3-0365-0247-2, 2021.

### Thesis

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**An adaptive hybrid deep learning architecture for sentiment analysis-based recommendations on social networks.**

*Author:* Cach Dang  
*Directors:* Moreno, M.N.  
*Codirectors:* Fernando de la Prieta Pintado  
*Reading Date:* 2021-10-25.

**Código ictus en Salamanca: Atlas clínico descriptivo y con minería de datos.**

*Author:* Araceli Rodríguez Vico  
*Directors:* Fernando Sánchez Hernández , Moreno, M.N.

## Celebrated events

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### **The 1st International Electronic Conference on Information (IECI 2021).**

*The 1st International Electronic Conference on Information (IECI2021) is designed to bring together researchers working in the field to present and discuss their recent contributions without needing to leave the comfort of their home. Attending and participating in this online conference is free of charge.*

*Information has always been pervasive and omnipresent, but only recently has information become visible and people better understood its importance. As a result, the study of information only started in the 20th century, and researchers have suggested numerous concepts of information and created many theories of information, such as syntactic information theory, statistical information theory, semantic information theory, algorithmic information theory, and economic information theory, to name but a few. This diversity of information theories and concepts of information was unified by the general theory of information, which explained the essence of information, encompassed all other information theories, revealed physical and mental counterparts of information, and provided scientific explanations to many information mysteries.*

*In addition, the information approach has been exploited in many areas, such as physics, biology, and sociology.*

*We sincerely welcome you to take part in this conference, exchange and share ideas and experiences, discuss the latest developments, and identify future trends for information theory, information technology and applications as we continue to move forward.*

*We will make every effort to facilitate interaction and the exchange of ideas during the conference period. All presenters will have two options in the conference participation: either to prepare a poster or video of your presentation, which will be uploaded onto the conference platform in advance, for viewing by others during the conference period. We will announce further details of the technological requirements and schedule in due course.*

*The conference will consist of three sessions, which reflect the interdisciplinary nature of information and its applications:*

*Session A: Information Systems and Applications*

*Session B: Information Processes and Artificial Intelligence*

*Session C: Information Theory and Communications Technology.*

*Place: online.*

*Start Date: 2021-12-01.*

*End Date: 2021-12-15.*

*Organizers: María N. Moreno García*

## Research Projects

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### **Sistemas de recomendación para servicios de streaming basados en el análisis de datos de medios sociales mediante técnicas de machine learning**

**Participating entities:**

**Start Date:** 1/1/2019

**End Date:** 31/12/2021

**Principal Researcher:** María N. Moreno García