# **Research Groups**

# Intelligent Information Access Systems (SINAI Research)

## **Description**

SINAI research group at the University of Jaén is made up of ten research members from the Computer Science Department. The main lines of research are Natural Language Processing (NLP) and Information Retrieval (IR).

### Website

# Signal processing in Telecommunication System

### **Description**

The "Signal Processing in Telecommunication Systems" research group works mainly on applications for signal processing and artificial intelligence, acoustic intelligence, music technologies and characterization and inspection of materials by means of ultrasonic nondestructive testings.

#### Website

# **Intelligent Systems and Data Mining**

# **Description**

SIMIDAT (Intelligent Systems and Data Mining) research group is made up of eleven researchers from the Computer Science Department, eight of which are in possession of a doctorate degree.

### Research lines:

- Data science
- Data mining in Big Data
- Predictive data mining: classification (binary, multi-cass and multi-label), regression and time series forecasting
- Descriptive data mining: association rules, description of subgroups, clustering
- Data pre-processing
- Evolutive, fuzzy and neural systems and hybridizations.

## Website

# **Intelligent Systems Based on Fuzzy Decision Analysis**

#### Description

Sinbad² is our research group and its name is the acronym of Intelligent Systems Based on Fuzzy Decision Analysis. In this site, you will be able to find information about our work, publications and research, as well as all relevant information about the group. Welcome!

The group Sinbad<sup>2</sup> was born in the University of Jaén in 2007 with code PAI TIC-206, previously the group was integrated in the research group Intelligent Systems of the University of Jaén with code PAI TIC-170 which was born in 2000.

#### Website

### Multimedia & Multimodal Processing

#### Description

The group created in 2011 brings together researchers, doctors and professors in the Telecommunication Engineering and Computing departments who have experience in different research fields such as artificial intelligence, metaheuristic optimization, audio processing, virtual reality, man-machine interfaces, artificial vision and robotics.

#### Website

# **Telematic System Engineering**

### **Description**

The TIC-220 Telematic System Engineering research group was created within the Jaén University Telecommunication Engineering department and currently comprises five doctors and two doctoral students.

The group's main research line is the design and integration of knowledge-based systems in devices with restricted resources and their application in the Internet of Things (IoT).

### Website

# **Computer Graphics and Geomatics**

# **Description**

The TIC-144 GROUP of the PAI (Andalusian Research Plan) called Computer Graphics and Geomatics was formally established in 1995 from the reading of the doctoral thesis of Professor Francisco R. Feito. The group initially came up with seven researchers. Currently, the group has fifteen members (fourteen researchers and a collaborating technician), eight of which are in possession of a doctorate degree. The fields of work focus on Computer Graphics and Geomatics.

#### Research lines:

- Computational Geometry
- Geometric Modeling
- Solid Modeling
- Advanced applications in Computer Graphics
- Geoinformatics
- Design and implementation of 2D/3D/4D Space Information Systems

### Website