# (Aplicación Avanzada de Filtrado Colaborativo) - Advanced Collaborative Filtering Application

#### **Contact information**

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## **Technological Offers type**

Software

#### Research and innovation areas

• Tecnologías digitales, Inteligencia Artificial, ciberseguridad, 5G, robótica

## Where?

KNOwledge Discovery and Information Systems (KNODIS) MERCATOR: Geoinformation and Smart Systems Technology University Automotive Research Institute (INSIA)

### **Software description**

1. Computer program description. This application, which is also provided as an API, is capable of processing numerical or enumerated ratings databases that a set of users have made on a set of elements (for example, users of a travel agent about the various destinations on offer).

Taking these ratings as a starting point, the application does classic, content-based collaborative filtering, using mathematical equations known as original or characteristic mathematical equations, which are the result of research work carried out by the authors in the field of recommendation systems.

The results obtained make it possible to offer accurate recommendations to users based on the existing ratings of a variable set of users which are considered to be more similar to each one of those recommended.

The application also provides measurements of the quality of the results, with the aim of trying to minimise existing errors between the estimates calculated by the system and the ratings from each user.

As the software is structured as an API, it is possible to use it as a basis for modular creation of larger sized systems.

2. Java 3 programming language. Multi-platform operating environment (based on the Java virtual machine)

#### Reference

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