



COMPUTER INTELLIGENCE IN BIOMEDICINE



INTRODUCTION

This research group is mainly dedicated to the design and application of Computational Intelligence techniques and algorithms to solve problems in different scopes, particularly in the field of biomedicine and bioinformatics. The group has a consolidated track record in the execution of research projects in collaboration with both Spanish and foreign research groups belonging to the areas of molecular biology, oncology, pathology, surgery and physics. The three main lines of research define the scientific trajectory of the group: i) Design and application of artificial neural network algorithms and to engineering and health sciences; ii) Hardware implementation of learning and application algorithms in industrial environments; and iii) data mining in bioinformatics and implementation in oncology field. The main milestone of the group in this section is the design and implementation of an oncology information system (Galén) in the UGC Oncología Intercentros of the main hospitals in the province of Malaga. The objective of this information system is, on the one hand, the management and coordination of all the processes involved in the operation of a medical oncology unit, and on the other hand, the production and analysis of real world data in oncology using techniques and algorithms from the field of artificial intelligence and natural language processing.

RESEARCH TOPICS

- Deep learning.
- Natural language processing.
- Medical informatics.
- Data and text mining.
- Bioinformatics.

SCIENTIFIC-TECHNICAL SERVICES

- Design of predictive models in health.
- Development of software in clinical field.
- Clinical data mining.
- Bioinformatics analysis.

RESEARCH GROUP LEADER: JOSE MANUEL JEREZ ARAGONES
PAI CODE: TIC226

CONTACT

PHONE: 952 132 895

E-MAIL: jmjerez@uma.es | WEB: <http://www.icb.uma.es/icb>

ADDRESS: ETSI Informática de la Universidad de Málaga; Bulevar Louis Pasteur, 35, 29071 Málaga