Title: *Combined Machine Learning Techniques for Decision Making Support in Medicine*

Ponente: Dra. Ruxandra Stoen (Department of Computer Science, University of Craiova, Romania)

Lugar: Ingeniería de Telecomunicación- Sala de Grados A

Fecha y Hora: Jueves, 12 a las 11:30

Idioma: Inglés

Abstract: Computational intelligent support for decision making is becoming increasingly popular and essential among medical professionals. Also, with the modern medical devices being capable to communicate with ICT, created models can easily find practical translation into software. Machine learning solutions for medicine range from the robust but opaque paradigms of support vector machines and neural networks to the also performant, yet more comprehensible, decision trees and rule-based models. So how can such different techniques be combined such that the professional obtains the whole spectrum of their particular advantages? The presented approaches have been conceived for various medical problems, while permanently bearing in mind the balance between good accuracy and understandable interpretation of the decision in order to truly establish a trustworthy 'artificial' second opinion for the medical expert.

Personal data: Dr. Ruxandra Stoean is Associate Professor at the Department of Computer Science, University of Craiova, Romania. Her interest in evolutionary computation and support vector machines is revealed by more than 60 published papers, two book chapters and one book published by Springer, while the impact of her research is reflected by an h-index of 8 on Thomson Reuters Web of Science. She was and is involved in several projects related to automated learning in medicine funded by national research agencies. She was awarded the prize Grigore Moisil for Computer Science by the Romanian Academy in 2008 for her research results.