

Name of the Project: Statistical preference for imprecise data.

Company name: Univ. Oviedo

Duration / Location: 3 months/Gijon (Asturias, Spain)

Area: Statistics and O.R.

Supervisor: Dr. Susana Montes

Project Description and Goals: The aim of this project is to study the concept of statistical preference, as a way to compare two random variables, when the data are imprecise. Statistical preference is an order relation which can be used as an alternative to stochastic dominance to order a set of random variables. This order relation is obtained from a probabilistic relation which is based on the stochastic comparison of the two random variables. We have obtained some result in the case of classical random variables, but we are now interested in the case of an experiment with imprecise data.

Intern role description: The role of the student during his/her stay should be to collaborate as a member of our research group in all the task related with the project. Thus, he/she should learn to obtain information about relevant literature about this topic by means of internet (Science direct, Mathematical Review, Scopus, ...). He/she should learn the usual schedule of scientific paper and how to obtain the main data in any paper. Apart from that, he/she will be introduced in this topic and he/she will collaborate with us in our research. He/she will have some specific tasks and, of course with our help, he/she will be in charge of these tasks.

Profile; Skills & experience pre-required: A mathematics degree or at least an student in the last courses of this degree should be the most appropriate. The student should be interested in mathematical reasoning and familiarized with proofs.

Benefits of learning experience: 1.- An international experience and a first approach to research. 2.- Possibility of a future collaborative research. 3.- First-hand knowledge of Spanish culture, language and, in particular, Spanish University system.

Other comments: We had a similar project last year and the experience was very fruitful for both, the student and our group. As a consequence of this visit, all together have presented a communication in a conference and we are preparing a paper to be published in a JCR journal. More information about the group in: <http://enol.epsig.uniovi.es/smotes> (in Spanish).