## PROJECT DESCRIPTION

Title: Development of the theory and practice of algorithms for soft constraint

processing in the context of combinatorial optimization

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Hard Combinatorial Optimization problems occur for instance when planning the timetable of a school or university, when designing the sports calendar of a league, or when scheduling the use of scarce resources (e.g. surgery equipement in a hospital).

The purpose of this project is to advance in the theoretical and practical development of algorithms for such type of problems.

We are seeking for a candidate willing to make his/her PhD in the context of barcelogic.com, a just born company that applies deep high-technology algorithms to daily problems (see webpage for more details). The candidate should have good programming skills as well as good mathematical background.

We offer an excellent research environment. The candidate will be sorrounded by internationally respected researchers with a record of publishing in top quality journals.

The research will be a perfect balance between theoretical work and its practical application.

## **UPC RESEARCHER CONTACT**

Professor: Javier Larrosa

Department: Department of Software (LSI)

email: larrosa@lsi.upc.edu

web: www.lsi.upc.edu/~larrosa

## OTHER INFORMATION

Funding: around 2.000 €/moth

Duration: 4 years

Facilities: office, desk, computer, money for traveling to conferences, top-quality research

environment