



## Date of publication of the job offer

22th April 2020

Job title

Postdoc researcher position

## Job description

The Business Analytics Research Group of the Universitat Pompeu Fabra (Barcelona, Spain) is seeking a highly motivated applicant with a keen interest in doing research in optimization related to home care services in the framework of the EPHoCaS project. Development of optimization algorithms (heuristics, metaheuristics, exact algorithms)

- 1. Development of optimization algorithms (heuristics, metaheuristics, exact algorithms)
- 2. Algorithm testing
- 3. Gathering data
- 4. Paper writing

## Project and Institution that finance the contract

EPHoCaS - The social urgency of a growing elderly population: Building sustainable home care services - is a national research project granted by La Caixa which focuses on the growing ageing section of the population in Spain and the need of optimizing the home care services (minimizing the associated costs) required to fulfill their wellness.

The main idea is to guarantee the quality of life of elderly people through a better use of limited resources, allowing to extend the benefits of these home cares to an increasing ageing population. Therefore, the global project mission is to improve the home care services for elderly people throughout innovative quantitative methods: new mathematical models, algorithms and systems, based on Operations Research and Analytics successfully applied to several industries. This will help decisions makers, policymakers and care managers to take better decisions leading to a positive impact on the society in terms of health, social benefit, and cost efficiency.

#### Official number reference

PRFUN00220 - CAIXA SOCIAL 19-SR0225-De Armas, Jesica

# Information on the minimum requirements

- PhD in Computer Science, Mathematics, <u>Operations Research</u>, <u>Data Analytics</u> or similar
- Experience programming in Java/C++ language
- CPLEX/Gurobi/AMPL knowledge
- Fluent in English
- Knowledge about Metaheuristics is valued
- Good track of publications in international journals and conferences of the area are valued





# Benefits of the opening

The postdoc will be hired through a 1-year postdoctoral contract with a salary in the range of 29,000-43,000€ gross, depending on experience and skills. The incorporation will take place as soon as possible.

Information on the application process

Applications must be sent by email

**Deadline to submit applications** 

17<sup>th</sup> May 2020

**Contact** The postdoc will be supervised by <u>Dr. Jésica de Armas. (jesica.dearmas@upf.edu)</u>