Main functions

We are looking for a post-doctoral researcher with a solid knowledge background in Artificial Intelligence and more specifically in the areas of optimisation using metaheuristics and deep learning. The researcher will perform the following functions: Autonomous execution of international, national and regional projects in collaboration with the PI of the project. To model and solve optimisation problems using metaheuristic techniques to tackle problems related to the optimisation of transport networks. To model and design Deep Reinforcement Learning techniques for the optimisation of transport networks. To design and develop software modules for deploying optimisation models based on metaheuristics or Deep Reinforcement Learning models in production. To draft reports and writing of scientific papers. To support interaction and communication with the rest of the project partners. Technical and scientific development of research projects and subsequent transfer in your area. To support the materialisation of project proposals and offers from a scientific-technical point of view. To support the administrative management of the projects in which he/she is involved.

Requisites

General Requirements
- University degree in computer engineering, telecommunications engineering, computer science, applied mathematics or similar.
- At least two years of experience as a PhD in areas related to optimisation using metaheuristics and/or application of deep learning techniques. Solid technical and research background, proven through publications in journals indexed in the Journal Citations Report.
- Solid programming experience in Java and/or Python.
- Experience in deep learning frameworks such as Tensorflow, Keras, Pytorch, etc...
- Experience in executing research projects related to the application of Artificial Intelligence techniques.
- Fluent in English (written and spoken).
- It will be also considered as a Plus: Experience in the application of Artificial Intelligence techniques in the area of transport and, preferably, in the optimisation of transport networks. Previous experience in the use and application of optimisation techniques based on surrogate models. Previous experience in the use and application of Deep Reinforcement Learning techniques. Previous participation in H2020 and/or FP7 projects.