Please, consider sharing this call for postdoc among colleagues, post-docs and last-year PhD students.

*** CONTEXT AND MAIN PURPOSE ***

The Connected Environment & Distributed Energy Data Management Solutions (OpenCEMS) industrial chair addresses the issues that businesses and communities encounter when handling data management in their distributed energy and connected environments. The OpenCEMS research group aims at designing, implementing and deploying software solutions within Small and Large Scale Distributed/Connected Environments for better data collection/aggregation, information retrieval, and knowledge extraction. To achieve its objectives, OpenCEMS is developing an open framework capable of scaling and optimizing power grid operations.

*** DESCRIPTION OF THE POSTDOC ACTIVITIES ***

• The global objective of this postdoctoral fellowship is the design and implementation of the following modules in the existing OpenCEMS platform: (i) Smart mobility module that simulates the intelligent mobility of objects in a real and simulation world; (ii) Smart communication module including peer-to-peer, self-forming and ad-hoc networks characterized by highly dynamic and autonomous topology, and (iii) Data analysis module based on machine learning, deep learning and reinforcement learning techniques.

• The postdoc activities also target the interaction between users and the platform. This entails providing a monitoring dashboard: (i) to model and interact with the mobile devices, (ii) to detect and repair issues that may occur in such connected environment, and (iii) to monitor the performance of the environment’s services (e.g., network overhead, network management, environment behavior, simulations, event/collision detection and handling).

• The postdoc is required to provide support to ongoing PhD student projects, and activities that evolve around the same research area.

• The postdoc will be also involved in small load teaching activities related to Computer Science subjects.

*** REQUIREMENTS ***

• The candidate should hold a PhD in Computer Science. His/her work should be related to smart mobility, distributed systems, and ad hoc networks.

• Proven experience in machine learning, smart mobility, mobile ad hoc networks and simulations.

• Excellent scripting and coding skills.

• Excellent Communication skills.

• Autonomous and team working capabilities.

*** OFFER DETAILS ***

• The postdoc will have the opportunity to work in a research group that gathers academic, and industrial partners. This environment allows the postdoc to participate in research gatherings, conferences, and visiting/working in different environments (e.g., in a research lab, partner institutions, and companies).

• Contract duration: 12 months (with a contract extension possibility).

• Gross Salary: 2300-2600 euros/month (depending on the candidate’s profile)

• Main host institution: LIUPPA/OpenCEMS research group.

*** APPLICATION INSTRUCTIONS ***

Please send your applications (in PDF format) to the following contacts: richard.chbeir@univ-pau.fr, philippe.arnould@univ-pau.fr.

The application (written in English) should include:

• A Curriculum Vitae (including your contact address, work experience, publications, software repositories)

• A cover letter

• Two recommendation letters

• Two of your best publications/implementations


Start date: September 1st, 2020 (negotiable).

Screening of applications starts immediately and will continue until a candidate is selected. Therefore, early applications are encouraged.

*** REFERENCES ***
Here are some recent papers that correspond with the scope of the OpenCEMS project: