Postdoctoral position in Data Mining for Predictive Maintenance

Duration: 12 months  
Location: Strasbourg - ICube Laboratory (UMR 7357), Illkirch campus  
Salary: 2400€ per month

Context. The HALFBACK project (http://halfback.in.hs-furtwangen.de/) started on April 1st 2017 with an INTERREG funding from the European Union. The project comprises three academic partners: Hochschule Furtwangen (Germany) which coordinates the project, INSA Strasbourg and Université de Strasbourg. Partners from Strasbourg belong to ICube Laboratory, and more precisely to the Data Science and Knowledge team (SDC - http://icube-sdc.unistra.fr/en/index.php/Main_Page). The project is done in collaboration with some small and medium-sized enterprises (SMEs) from the cross-border (France and Germany) space that provide data.

The ICube Laboratory (http://icube.unistra.fr/en/) gathers around 650 members in the fields of engineering science and computer science. It is located in Strasbourg (http://en.strasbourg.eu/en/home-en/), north-east of France, which is a lively city with a rich history and the seat of several European institutions. The entire city centre has been listed as a UNESCO World Heritage site since 1988.

Project objectives. The HALFBACK project aims to propose tools to manufacturing SMEs, in order to ensure a high availability of production processes. More precisely, it aims to develop tools for predicting machine failures and to build a network of SMEs, so as to transfer part of the production from one company to another in case of a machine failure or of an order too big to handle by a company. The SDC team will in particular work on predictive maintenance using data mining and process mining techniques.

Work. The work will concern knowledge discovery from data produced by sensors and provided by the SMEs involved in the project, so as to perform predictive maintenance. The volume of data to deal with is very large, the data can be noisy and events to predict can be rare.

Profile. Candidates should hold a PhD in Computer Science and have skills in Data Mining, especially techniques dealing with temporal data. Knowledge in process mining and sensor data would be a plus.

Application. To apply for this position, send a CV and a cover letter to  