**Discipline**: A post-doc position is offered at CERI SN Centre / IMT Lille Douai as a part of CPER Data project

**Type of contract and duration**: 12 months of contract

**CONTEXT**:

Created by the merger of Mines Douai and Telecom Lille on January 1st, 2017, **IMT Lille Douai** is the largest graduate school of engineering in the north of Paris. It aims at teaching the general engineers and digital experts of the future. Located at the crossroads of Europe, between Paris, London, Brussels and Amsterdam, IMT Lille Douai intends to become a major player in industrial and digital transformation of the society by combining engineering science and digital technologies.

Based on two sites dedicated to research and education in Douai and Lille, IMT Lille Douai has research facilities of almost 20,000m² devoted to high-level scientific activities in the following areas:

- Digital science,
- Energy and Environment,
- Materials and Process engineering applied to polymers, composites and civil engineering.

**IMT Lille Douai** aims at strengthening its Digital Sciences and Technologies Center both in Machine Learning and Control Systems domains, but also at developing cross-cutting research activities with the other Centers and Partners. The central axes of the Centre are based on the study of digital science and processes for Industry and services in tackling environmental, digital and international challenges. Most of its works concern original Big Data and ICT-based solutions for better system management. The successful applicant will work on the frontier between machine learning and control theory/system identification. System identification is a sub-discipline of control theory which aims at learning dynamical models (difference/differential equations) from data and use these models for decision making (control). Recently, the same problem has gained attention in the machine learning community.

The specific tasks the candidate is expected to contribute to are:

- To study and develop algorithm related to system identification/ Classification/Clustering
- Study and apply model predictive controller for complex system
- Make connection between machine learning techniques and control systems
- To experiment on benchmark examples related to Building or Industry.

For more details, visit the School’s website: [www.imt-lille-douai.fr](http://www.imt-lille-douai.fr)

We are looking for a candidate with a strong scientific background and a PhD in one of the following fields: control theory, system identification, machine learning and statistics.
REQUIRED PROFILE:

The candidate must hold a PhD Thesis in Machine Learning, Automatic Control, Model estimation. The candidate must demonstrate scientific expertise and abilities to implement solutions in domains of application such as smart manufacturing and smart cities.

BIBLIOGRAPHIE:


CONDITIONS:

The job is to be filled as to as soon as possible for a period of 12 month (temporary contract).

INFORMATION AND APPLICATION METHODS:

For any information on the missions, please contact:
Dr. Lucien ETIENNE - Digital Sciences and Technologies Center
Tel: +33 3.27.71.25.26  Mail: lucien.etienne@imt-lille-douai.fr

Pr. Stephane LECOEUCHE - Digital Sciences and Technologies Center
Tel: +33 3.27.71.24.45 Mail: stephane.lecoeuche@imt-lille-douai.fr

Dr. Lala RAJAOARISOA - Digital Sciences and Technologies Center
Tel: +33 3.27.71.23.38  Mail: lala.rajaoarisoa@imt-lille-douai.fr

To apply, please send a detailed CV, a letter of motivation with explicit reference to the offer «Post-doc : machine learning and control systems : Data driven control » by e-mail to the Human Resources Department (jobs@imt-lille-douai.fr).

DEADLINE DATE FOR SUBMISSIONS: 15/06/2020