

# Application for the post of Associate Assistant Professor in Multiagent Systems Henri Fayol Institute

# **Intelligent Systems and Informatics Department**

#### Context

Mines Saint-Étienne, an IMT graduate school under the supervision of the Ministry of the Economy and Finance, is responsible for training, research and innovation, transfer to industry and scientific, technical and industrial culture.

Mines Saint-Etienne represents: 1,800 engineering students and researchers in training, 420 employees, a consolidated budget of €50 million, two campuses (one in Saint-Étienne (Loire) with three sites, one located in Gardanne (Bouches-du-Rhône), 5 training and research centres, 7 research laboratories, a scientific, technical and industrial culture centre ("La Rotonde") and development projects in France and abroad.

The Henri Fayol Institute is a training and research center that brings together Mines Saint-Étienne's teacher-researchers in industrial engineering, applied mathematics, computer science, environment and management. The Henri Fayol Institute contributes to decision support for companies and territories through a quantitative, IT and managerial vision for sustainable development purposes.

The Intelligent Systems and Informatics (ISI) department is one of the four departments of the Fayol Institute. ISI aims to contribute to the development of computational models, algorithms and architectures for the interconnection of the physical, digital and social worlds. This objective is considered in the context of the development and deployment of increasingly complex socio-technical applications in domains such as the "Industry of the future" and the "City of the future". To validate, enhance and disseminate the results carried out within the institute in real conditions, two technological platforms have been developed. The first is dedicated to the city of the future (**Territoire**¹ platform) and the second to the industry of the future (**ITM'Factory²** platform):

## Scientific project

The scientific objective of the newly hired researcher is to contribute to the artificial intelligence research carried out within the ISI department in the domain of multi-agent coordination or multi-agent based simulation:

- Multiagent system: Models, architectures, and algorithms for decentralized coordination of autonomous decision-making systems.
- Multiagent simulation: Models, algorithms for improving quality and/or efficiency of simulation of autonomous agents

## **Candidate profile**

The candidate must hold a PhD with knowledge of multiagent systems models and technologies and/or multiagent based simulation. Good knowledge on Web of Thing or Internet of Thing, on the Web architecture and technologies will be appreciated.

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<sup>1</sup> https://territoire.emse.fr/

<sup>&</sup>lt;sup>2</sup> https://www.mines-stetienne.fr/entreprise/itm-factory/

The candidate should be capable of covering a relatively large spectrum within the teaching of computers sciences and more specifically: algorithmic, programming (object, web, mobile), engineering and software architecture, internet of thing, artificial intelligence, semantic web.

### **Recruitment conditions**

- 12-month research engineer position on fixed-term contract
- Position based in Saint-Etienne (Loire).
- Desired start date: 01 September 2020 and no later than 1 December 2020

# How to apply

CV + cover letter should be sent at first to Amandine HIRONDEAU, adjoin of Director of Personnel and Human Resources and copy at Flavien BALBO : <a href="mailto:amandine.hirondeau@mines-stetienne.fr">amandine.hirondeau@mines-stetienne.fr</a> and <a href="mailto:flavien.balbo@mines-stetienne.fr">flavien.balbo@mines-stetienne.fr</a>

Deadline for application: Before June, 20th 2020 by mail

## For additional information

For any information on the position, please contact:

- Henri Fayol Institute director
   Bruno LEGER, Tel + 33 (0)4 77 49 97 37, email: <a href="mailto:bruno.leger@emse.fr">bruno.leger@emse.fr</a>
- Intelligent Systems and Informatics department responsible:
   Pr. Flavien BALBO, Tel +33 (0) 04 77 42 01 71, email: <a href="mailto:flavien.balbo@emse.fr">flavien.balbo@emse.fr</a>

For other administrative information:

Amandine HIRONDEAU

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