


IMT Mines Alès
École Mines-Télécom


SCIENCE & CREATIVITY TO INVENT A SUSTAINABLE WORLD

We are HIRING

Research Engineer – Personalized recommendations for AI training modules

Institution	IMT Mines Alès (National School of Mines of Alès)
Main assignment	Centre for Teaching and Research in Computer Science and Systems (CERIS)
Administrative residence	Alès (Gard department – Occitanie region)
Type of contract	36-month fixed-term contract – Public law contract – Full-time
Start date	**February 2, 2026**

1 Presentation of our institution, CERIS, and the MACMIA project

1.1 The Institut Mines-Télécom

The Institut Mines-Télécom (IMT) is a public scientific, cultural, and professional institution under the primary supervision of the ministers responsible for industry and digital technology. This leading group of engineering schools in France brings together 11 public engineering schools across the country, which train 13,500 engineers and PhDs annually. IMT employs 4,500 people and has an annual budget of €400 million, 40% of which comes from its own resources. IMT has two Carnot institutes, 35 industrial chairs, produces 2,100 A-rank publications and 60 patents annually, and carries out €110 million worth of contract research.

1.2 IMT Mines Alès

Founded 180 years ago, **IMT Mines Alès** currently has 1,400 students (including 250 foreign students) and 380 staff. It has two campuses in Alès and also has sites in Montpellier and Pau. Its students are general engineers, specialist engineers (through apprenticeships), doctoral students, and master's or specialized master's students. The school has three high-level scientific and technological research centres, which are open in the fields of materials and civil engineering (C2MA), the environment and risks (CREER), and artificial intelligence and industrial / digital engineering (CERIS). IMT Mines Alès also supports economic development through programs that assist businesses and local communities.

At IMT Mines Alès, each person is a key player in our Sustainable Development and Social Responsibility (SDSR) approach. We are committed to promoting environmentally friendly practices, fostering diversity and inclusion, and ensuring ethics in our activities. We encourage all our employees to adopt a responsible approach in their daily actions and to propose innovative ideas that reinforce our positive impact on society and the environment.




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1.3 Centre for Teaching and Research in Computer Science and Systems (CERIS)

CERIS is structured around two main areas of research. The first is the engineering of complex systems and organizations for high-risk activities, and the second is computer science and artificial intelligence. Two teaching departments are attached to it: 2IA for *Computer Science and Artificial Intelligence* and PRISM for *Industrial Performance and Mechatronic Systems*, as well as two technology platforms, AIHM for *Alès Imaging and Human Metrology* and PFM for Mechatronics *Platform*.

1.4 The MACMIA project

MACMIA (**Massification of Artificial Intelligence Skills and Jobs**) is a project funded by the French government as part of the France 2030 recovery plan, led by the Institut Mines Télécom (IMT). Focusing on **Artificial Intelligence** it aims to co-develop, with academic partners (Esigelec, UTT, CMQE) and economic players (large companies, groups, OPCO, professional branches, etc.), **a range of training courses for technicians, engineers, dual-skilled managers, and researchers** in the field of "AI & Industry of the Future," as well as embedded AI and smart mobility, and AI & Health. The MACMIA consortium covers eight regions of metropolitan France, and these training modules can be adapted and **delivered in different locations and through different teaching methods**.
Given the **diversity of learner profiles** (students in initial training, continuing professional development, trainers, etc.) and their **learning contexts** (geographical location, availability, access to specific equipment, etc.), the range of variations in these training modules can be multifaceted and require personalized support for individuals to achieve a defined (professional target). To this end, the MACMIA project plans to use AI to serve AI, i.e. an **AI engine that recommends individualized training paths.** At the crossroads of research in recommendation, and particularly the integration of a priori expert knowledge (ontologies) into recommendation and machine learning (based on user traces), the design and development of this engine is an ambitious task, which is the subject of this job opening.

2 Job description

The position is based at **the Center for Teaching and Research in Computer Science and Systems** (CERIS) at IMT Mines Alès and works closely with the **EuroMov Digital Health in Motion** (DHM) research unit at the University of Montpellier.

As **a research engineer at CERIS**, your main task will be to design and develop this recommendation engine. You may also be required to facilitate the implementation of other training activities for the MACMIA project (support for the delivery of the "fundamentals of AI" modules (levels 1 and 2). These actions may be aimed at the traditional audience of our schools (students in initial training) or professionals (Life-Long Learning) for **the regional industrial ecosystem.** Finally, the MACMIA project aims to promote the professional integration of all, and the recommendation must therefore also take into account the specific characteristics of the person to be trained, such as a potential disability or a particular technical context.

The main tasks will be as follows:

- **Needs analysis** in collaboration with project partners (business and educational experts): understanding the specific characteristics of different sectors (services, manufacturing, finance, health, etc.) and types of companies in order to refine the recommendations.
- **Design and development** of an AI recommendation engine for selecting training modules tailored to user profiles. This hybrid AI will be based on a knowledge graph that models the different themes related to professions, expected skills, and available training, as well as on *machine* learning or generative AI models.
- **Technology watch** on AI recommendation models and optimization of recommendation algorithms.
- **Implementation** of the recommendation engine on the **IMT EXED platform** (https://imtexed.fr/ – Moodle technology) dedicated to lifelong learning.
- **Testing and validation** in real-life situations, taking into account pedagogical aspects to adapt and personalize the methods to the profiles of learners (skill levels, learning preferences, access to technologies, geolocation, disability, etc.).



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Required profile and general evaluation criteria

Required skills, knowledge, and experience:

- **Programming**: skills in Python, as well as in libraries related to AI and data processing.
- **Database management**: skills in relational and non-relational databases, as well as in managing large amounts of data.
- **Proficiency in web development techniques;** experience with the Moodle platform would be a plus.
- Solid experience in **machine learning** (**deep learning**); a good understanding of recommendation algorithms, collaborative filtering, and content-based techniques would be a plus.
- Agile **development methods** and scientific project management; integration of existing LLMs to be expected.

Skills, knowledge, and experience appreciated:

- **Desired experience in the use of** knowledge graphs (KG): implementation of these graphs to structure and exploit expert knowledge.
- **Knowledge of pedagogy** and training course design would be a plus.
- Any experience demonstrating the qualities of the person recruited.
- Strong interest in the challenges of AI

Behavioural and interpersonal skills

- Dynamism
- Autonomy
- Commitment
- Multidisciplinary teamwork
- Ability to communicate effectively
- Strong motivation to contribute to innovative projects
- Rigorous and methodical
- Initiative
- Adaptability
- Organizational skills
- Ability to develop skills in new technologies

Minimum education and/or experience required:

- Degree **in computer engineering** or equivalent

Application

Administrative application requirements

The position offered by IMT Mines Alès is a 36-month, full-time fixed-term contract under public law, governed by the provisions of the Institut Mines-Télécom management framework, profession R, Research and Development Engineer, category II.

The position will be based at IMT Mines Alès, but travel may be required as part of the MACMIA project.

Salary: to be determined based on profile and experience.

Application procedure

Applications (CV and cover letter) should be sent exclusively to:
https://institutminestelecom.recruitee.com/o/ingenieure-de-recherche-recommandation-personnalisee-de-modules-de-formations-en-ia-cdd-36-mois-imt-mines-ales




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Recruitment schedule

Application deadline: **November 23, 2025**

Provisional date for the selection panel: **December 11, 2025**

Desired start date: **February 2, 2026**

Contact persons

- Regarding the job description:

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