



Postdoctoral position in computer science with teaching activity (160 hours by year)

Starting date : September or October 2023

Keywords : Human-Machine interaction, Artificial Intelligence, Virtual Reality

Duration: 24 months

Context : ENIB and Lab-STICC

The Brest National School (ENIB) of Engineers operates under the supervision of the Ministry of Higher Education. The institution is affiliated with the Mines Télécom Institute and is a founding member of the Alliance Universitaire de Bretagne. The facility is located in the Brest-Iroise technology park, near the ocean. The pedagogical team consists of around sixty full-time teachers. There are about 850 students in all.

The ENIB provides a five-year training program for general system engineers in the fields of electronics, information technology, and mechatronics. The lessons provided are geared towards the industrial world through numerous internships, as well as the establishment's research activities. The school trains its engineering students to work in an international setting. Reflexivity, activities in small groups, the use of projects and collective work, as well as the societal commitment of students are the hallmarks of the pedagogy. The school also offers four masters and two doctoral degrees.

The school is supervised by CNRS laboratories. The person who is recruited will work at Lab-STICC, which is composed of 9 research clusters and 25 teams. She will join the interaction cluster and the ENIB computer science teacher-researchers who are hosted at the European Center for Virtual Reality, which is an ENIB research platform.

1. Research

The recruited person will be expected to carry out and co-supervise research within the IT research entity of ENIB at the European Center for Virtual Reality (CERV). Human-machine interactions and artificial intelligence are the lines of research developed in this center.

Some researches are multidisciplinary. The investigation focuses on virtual reality, conversational agents, interactive narrative, the generation of scenarios, moods and audiences, adaptation to the user, embodied cognition, behavior measurement, cognitive sciences, and AI-related issues (explainability, trust, proof, energy, recommendation). Applications take the form of games and simulations for applications in cognitive remediation, transformational experiences, and creative industries. Depending on the candidate's scientific background, he or she may be asked to work on one or more ongoing projects in the laboratory. Although they are free to make their own proposals

Key words : COMMEDIA: Adaptive Interfaces, Affective Computing, Cognitive Models, Computational Storytelling, Embodiment, Animated Conversational Agents

INUIT: Virtual Reality, Augmented Reality, 3D Interactions, Tangible Interactions, Immersive Visualization, Interaction with Complex Systems, Multi-User Systems

RAMBO: Cognitive Robotics, Ambient Assistance System, Human-Robot Interaction

2. **Teaching**

The person will be teaching within the IT department of ENIB for the five years of training. The candidate will mostly be needed to help with common core tasks (https://www.enib.fr/scolarité/OF_Enib.pdf). He or She may also work in the fields of human-computer interaction or artificial intelligence. ENIB is currently in the process of integrating the competency-based approach and must develop problem-based learning activities. Thus, experience or interest in the implementation of active pedagogy would also be a plus for the candidate. Also, the person who is recruited is expected to be able to teach in English.

Keywords: programming and software design, information systems, artificial intelligence, project-based pedagogy, active pedagogy.

3. **Institution :**

The selected individual is expected to participate in the daily routine of ENIB and the UMR, including attending meetings of the research team, teaching division, task teams, and monitoring trainees' progress.

Working place : Technopôle de Plouzané

Salary : to negotiate

Brest and surrounding:

Brest is a second-largest student city in Brittany, with many higher education establishments and a wide choice of courses. Numerous Grande Ecoles offer students unparalleled opportunities in key disciplines, such as marine biology and technology, medical care, electronic devices, building and digital technology, which are widely acknowledged both domestically and abroad. It is an extraordinary territory, where life comes together in all modes. It has the feel of a large city on the move, with the sea. Brest opens up new opportunities. Brest, perched on its piece of land at the westernmost point of France, has a special aura, unique and plural at the same time. Brest Métropole, the capital of the oceans, is home to the strongest maritime scientific community in the country, with Ifremer, or the European University Institute of the Sea, to name just a few. From "Campus mondial de la mer" to "Shom" or "France Marine énergie", the territory has been able to attract everything that matters in terms of marine science and technology over the decades. Brest et ses alentours :

Rich in a major academic fabric, Brest metropolis attracts thousands of students from all over the planet, who come here to learn the basics of the ocean.



Contacts

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Links:

<https://www.enib.fr/en/w>

<https://labsticc.fr/en>

<https://cerv.enib.fr>

<http://www.brest-tourism.uk/en/>