

## **Researcher in distributed cooperation relying on wireless communication technologies (M/F)**

*Location:* Rennes (35), France  
*Web site:* <http://www.fr.mitsubishielectric-rce.eu/>  
*Job reference:* WCS-PERM-042022  
*Contract:* permanent, from May 1<sup>st</sup>, 2022

### Context and description:

As a MITSUBISHI ELECTRIC Group's subsidiary, one of the world's leading names in the manufacture and sales of electric and electronic products and systems, **MITSUBISHI ELECTRIC R&D CENTRE EUROPE** includes a division "Communication & Information Systems" (CIS) specialized in communications and distributed cooperation/control solutions for professional- and consumer-oriented applications.

This division, located in Rennes (Ille-et-Vilaine department, Brittany region, France) is involved in research studies on wireless communications applied to factory automation, vehicular systems, robotics applied to smart building and e-health. In this context, the research team is involved in standardization work, one-step-ahead innovation in collaboration with Japanese laboratories, and research collaborations with academic partners in Europe and France. This division is looking for a **Researcher with expertise in distributed cooperation**, with a main target on the integration of wireless communications and automatic control. The researcher will have the following activities:

- **Research** innovative solutions, algorithms, protocols for distributed cooperation systems involving automatic control and wireless communication technologies;
- Participate in **Mitsubishi Electric research activities**, including patent filing;
- Participate in the dissemination of research results through publication of papers, collaboration with academic or industrial partners in collaborative research projects, trainee or PhD student supervising;
- Participate to **proof of concept platforms** in order to demonstrate effectiveness of the proposed solutions to technical and business stakeholders.

### Required education and experience:

The **ideal** applicant has

- **a PhD degree in automatic control;**
- **At least 3 years of experience** (including the PhD experience) in research, within public or private R&D laboratories;

- **High expertise in automatic control: Non-linear systems, controllers' and observers' design, stability and controllability analysis, stochastic control, model predictive control (MPC), intelligent control, adaptive control, multi-agent systems (MAS);**
- **Expertise in wireless communications: Communication models for physical layer, multiple access protocols, quality of service management, 5G standards;**
- **Know-how on Artificial Intelligence/Machine Learning and Bayesian inference;**
- Applied knowledge of Python/C++/Matlab programming languages;
- Research experience marked by **publications** in high rank conferences and journals, and **patents**.

Personal profile:

- **Open-mindedness**, capacity to work in a multicultural and international environment;
- Ability to work across **multiple tasks** methodically and efficiently and meet committed schedules;
- Motivated to work in a **dynamic industrial research environment** and adapt to reordering of priorities;
- Excellent **communication and interpersonal skills**: Ability of sharing information with team players (must show evidences of team-working), of presenting the technical achievements in a comprehensive and appealing fashion, of adapting the content to the audience;
- **Fluent English**;
- **Availability** for business trips abroad (Japan, Europe, USA...).

Contact:

Magali BRANCHEREAU (Human Resource Manager)

Thanks to send your CV and motivation letter in PDF format by email (in object: your name + the reference WCS\_PERM\_042022) to: [jobs@fr.mercede.mee.com](mailto:jobs@fr.mercede.mee.com)