



Researcher in the fields of data analysis and control of mechatronic systems (M/F)

Location : Rennes (35), France

Web site : <http://www.fr.mitsubishielectric-rce.eu/>

Job reference: PES_PERM_052021

Contract : permanent

Context and description:

MITSUBISHI ELECTRIC is one of the leading manufacturers of power electronics related products from components such as power devices to systems such as HVDC. As MITSUBISHI ELECTRIC Group's subsidiary, MITSUBISHI ELECTRIC R&D CENTRE EUROPE includes a research division specialised in power electronics which performs fundamental research in the fields of integration and reliability of power electronic systems.

The research division is located in Rennes (France – Bretagne [35]) and is looking for a researcher specialized in the fields of data analysis and control of power electronic systems, with the following duties:

- Conducting **research** in the domain of **health and condition monitoring of power electronic systems and motors, failure detection** and **remaining lifetime estimation**.
- In **collaboration** with academic partners, **developing precise diagnostic and prognostic methods** applied to converters in real applications, and considering the **control**.

Education and experience required:

- **At least 3 or 4 years of experience (including PhD degree) within the field of data analysis and control**, preferably related to power converters and/or motors, through a public or private R&D laboratory (industrial experience is a plus).
- **Expertise in data analysis** (time-frequency analysis) and in **model identification with statistical and machine learning** (Bayesian approaches, Kalman filters etc.) technics, preferably applied to converters and/or motors.

- Practical experience on monitoring systems, sensors, embedded systems, and real-time control.
- Basic knowledge of the stress sources and reliability of converters and motors, and associated experimental procedures.
- Experience with control and simulation tools such as Labview, Matlab/Simulink, Python, PSIM, finite element analysis.

Personal profile:

- Ability to work across multiple tasks methodically and efficiently and meet committed schedules;
- Motivated to work in **dynamic environment** and adaptable to changes in priority;
- Excellent **communication** and interpersonal skills: ability of sharing information with team players (must show evidences of team-working);
- **Fluent English;**
- Availability for frequent international business trips.

Contact:

Magali BRANCHEREAU (HR Manager),

Thanks to send your CV and motivation letter in PDF format by email (in object: your name + the reference PES_PERM_052021) to: jobs@fr.mercede.mee.com