

THESIS IN VIBROACOUSTIC SENSORS FOR WHITE GOODS

The Global R&D – Sensors & AI team works on the development of innovative solutions in sensors for white goods.

The thesis project will be part of a feasibility study on the use of vibroacoustic sensors and will focus on data processing techniques to extract useful information to be used for ML algorithms.

The position involves working in an international and multi-competence environment.

Project title: Data processing to enhance vibroacoustic sensing

Background: Nowadays, the evolution of micromachining makes available on the market microphones and accelerometers at very reduced costs. It is already known that vibroacoustic sensing enables to detect anomalies, noise emissions, and to optimise process monitoring and control. Still, there's the need to work on vibroacoustic data in order to (i) minimise noise and/or increase signal-to-noise ratio and (ii) engineer features out of processed data that can be used to train ML-algorithms.

Activity focus: The MS Thesis Student will be working on the processing of vibroacoustic data collected in conditions of interest with the aim of enhancing information extraction from acoustic data so to assess the possibility to use vibroacoustic sensors to detect operative conditions that could affect the washing process and/or the machine functioning over the time.

YOU

- Team player;
- Good listener and communicator;
- Proactive. You are self-driven, results-oriented with a positive outlook. You are assessing and investigating feasibility of new technologies and ideas;
- Adaptive. You like challenges and you are flexible to adapt to new situations and contexts;
- Creative. You love to explore new ways of thinking and you are oriented towards innovation;

EDUCATION & EXPERIENCE

- Experience in one or more of the following areas: data processing
- Basic knowledge of written and spoken English