Signal Processing Research Engineer for Smart Machines

You develop advanced signal processing techniques to grasp smart machine behavior in technology research projects for the machine and vehicle of the future.

❖ Will you help us to tell autonomous vehicles and AGV’s where they are, or predict motion sickness with passengers using vibration measurements in a car?
❖ Do you want to test and validate your results on the actual machines and vehicles available in our test labs or at the customer, in the field?

Function

In the machine and vehicle of the future the process is monitored in no time, at any time.

As a signal processing research engineer, you will:

- Work together in a small research team which combines expertise in machine dynamics modelling, signal processing and experimental field testing;
- Play a key role in designing signal processing algorithms and testing them, taking into account controller and actuator requirements. Sensor fusion, virtual sensing, advanced filtering, algorithms for self-diagnostics and condition monitoring, physical modelling and feature extraction are in the scope of your research activities;
- Work with different machines and/or vehicles and with different sensor signals (vibration sensors, accelerometers, torque sensors, temperature sensors, … );
- Work in close collaboration with experts from our industrial partners and have regular contacts with experts from knowledge centres in Belgium and abroad;
- Become a sparring partner for our leading companies in their innovation process;
- Trace and present industrial challenges and new research opportunities.

Profile

You have :

- A master's degree or a Phd in Engineering (Mechanical, Electronical, Electrical);
- At least 4 years of experience in industry or in a research environment;
- Deep knowledge in the field of signal processing and modeling of dynamic systems;
- Experience with modeling software (Matlab, Simulink) and measurement systems (Labview, dSPACE).
You are:

- Passionate about research and new technologies;
- Result oriented, responsible, self-directing and a team-player;
- A good communicator;
- A good listener;
- Eager to learn.

Offer

- Flanders Make gives you the opportunity to develop yourself in the network of top industry and universities and research institutes;
- An open-minded, flexible and challenging working environment;
- A warm atmosphere and top colleagues;
- An attractive salary with fringe benefits.

Flanders Make

Flanders Make is the strategic research centre for the manufacturing industry. From our sites in Lommel, Leuven and Kortrijk, we stimulate open innovation through excellent research.

Our purpose: realising a top-level research network in Flanders that delivers full support to the innovation projects of manufacturing companies. This way, we want to contribute to new products and production processes that help to realise the vehicles, machines and factories of the future.

Because of our unique position between industry and research, our teams combine application and system proficiency with technological and scientific knowledge.
We focus on 4 key competences, all based on modelling and virtualisation:
1. Decision & Control
2. Design and optimisation
3. Motion product specification, architecture, and validation
4. Flexible assembly specification, architecture, and validation

Depending on your place of residence or preference, you can work on one of our sites (flexible workplace policy).

To apply, go to [http://jobs.flandersmake.be](http://jobs.flandersmake.be).
Please fill in the online application form and upload a motivation letter and cv.