Researcher Modelling, Simulation and Control for Smart Machines and Vehicles

You simulate multi-physical models for the design of smart machines and vehicles or develop and validate control algorithms.

Function

Mechatronic systems are becoming increasingly complex, we demand more features and better performances and impose more and more requirements onto systems. Consequently it is becoming more and more important to use intelligent model-based development methods.

On real-life industry motion systems applications, you will:
- Work together in a research team which combines expertise in control, machine dynamics modelling, and signal processing;
- Play a key role in analysis and system identification, in the development of multi-physical predictive models, and/or in the development of control algorithms;
- Work with different machines and/or vehicles;
- Work in close collaboration with experts from our industrial partners and have regular contacts with experts from knowledge centres in Belgium and abroad;
- Trace and present industrial challenges and new research opportunities.

Profile

You have:

- A Master or Phd in Engineering (Mechanical, Electronical, Electrical, Automotive, Modelling & Simulation, Control systems, Mechatronics, Robotics);
- Expertise in the field of modelling, simulation or control of dynamical systems;
- A Track record in research on topics closely related to research domains of Flanders make is a big plus;
- A keen interest to apply theoretical concepts on practical case problems. Any experience with applications on machines and/or vehicles is a plus, either in an academic or an industrial setting;
- Experience with modeling software (Simscape, Amesim, Matlab, a,d/or Simulink).
You are:

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

**Working at Flanders Make:**

This movie shows what you can expect from an industry driven research project at 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

Take a look at our research and our projects at Flanders Make. www.flandersmake.be

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

**How to apply:**

To apply, go to http://jobs.flandersmake.be.

Please fill in the online application form and upload a motivation letter and cv.