

Research engineer Smart machines

As a smart machines researcher you investigate in cooperation with the top companies in Flanders how you can increase the performance and energy efficiency of their machines such as harvesting machines, compressors, weaving machines, gear units,... You decide which sensors will be added to these machines and develop advanced machine control algorithms which process the sensor measurements with the objective to derive the optimal machine settings.

Machines of the future will always become smarter. More and more sensors (accelerometers, torque sensors, pressure sensors, flow sensors, temperature sensors, cameras,...) are being installed on machines to monitor the condition of the machine input, the quality of the produced product as well as the actual machine state. Advanced algorithms will be implemented on the machine controllers to calculate the optimal steering signals for the machine actuators based on this sensor information such that the machine optimally adapts its behavior.

Function

In state of the art research projects your tasks as smart machines researcher are:

- analysis and modeling of the working principle of the investigated machines;
- analysis of the required sensors to monitor the machine behaviour;
- model-based development of the control algorithms;
- lab and/or field validation of the developed algorithms on real machines from companies;
- presentation of the results of the research to the companies during seminars and conferences.

You will work in a team and report to the site manager.

Profile

You have

- Master's degree or PhD in Engineering (Control, Mechatronics, Mechanical, Electrical, Electronics,..) with practical knowledge of control algorithms and their practical implementation;
- Track record in research is a plus;
- Experience with Matlab and Simulink;
- Experience with control design for machines is a plus;
- Focus on technology and results for the industrial companies.

You are

- Passionate about engineering and new technologies;

- Result oriented, responsible, self directing;
- Team player and good communicator who can build sustainable relationships;
- Studious and want to increase your expertise.

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.

The assignment is in Belgium at Flanders Make, site Leuven.

How to apply

Please send your motivation letter and cv to: humanresources@flandersmake.be.