

Embedded Software Engineer for Controller Design (Leuven, Kortrijk or Lommel)

Create new innovative prototype software tools that support embedded control design.

At Flanders Make, we create new methods and intelligent software to support industrial designers of leading automotive and machine building companies in Flanders. New methods are needed to automate data handling in complex design processes, more specifically:

- to automatically generate design concepts;
- to optimise both control algorithm and embedded platform so as to enable embedded platform engineers to perform a trade-off analysis.

Develop & validate advanced software technology

As an expert in embedded and real-time machine software, you will:

- Work in a software research team to develop the above-described advanced software technology (frameworks) for the design of controllers for industrial concepts (compressors, active shock absorbers, weaving looms...);
- Take the lead in the validation of developed software technology and explain to the team the criteria for its successful implementation.

More concretely, you will:

- Set up the characterisation of the embedded software and hardware (objectives, memory and other constraints, execution times, buses...);
- Be actively involved from conceptual idea generation up to the implementation on a working demonstrator;
- Try to prevent possible implementation problems, as early as possible in the research process;
- Validate the new advanced software framework
 - Design, develop and, when ready, test key software components;
 - Run the code on ECU/TCU control units;
 - Translate the software model (model-based design algorithms) into a code (C++) wherever needed.

Experienced embedded software engineer

You have:

- A Master's diploma in Engineering (Computer Science, Information Science, ICT engineering, Mechatronics, Electronics...);
- Genuine interest in prototype software frameworks and are committed to acquire skills in some new modelling languages (SysML, Eclipse, Simulink...);
- A strong background in Design, Development, Implementation and Testing & Validation of embedded systems;

- Programming skills and knowledge of C++, Python and embedded operating systems (RTOS, embedded Linux) are required;
- Expertise in hardware, real-time operating systems, electronics or control engineering is a plus.

You are:

- Passionate about research and new technologies;
- Result-oriented, responsible and hands-on in progress;
- A team player;
- A good communicator;
- 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

is the strategic research centre for the manufacturing industry. Our mission is to strengthen the long-term international competitiveness of the Flemish manufacturing industry. That's why we work together with SMEs and large companies on pre-competitive, industry-driven technological research, resulting in concrete product and production innovation in the vehicle industry, the manufacturing industry, and production environments.

This animation movie illustrates how Flanders Make sees operators functioning in the factory of the future, working side by side with cobots, and autonomous mobile robots:

<https://www.youtube.com/watch?v=HHSAhXoaVKU>

Take a look at our research and our projects:

<http://www.flandersmake.be/en/agile-and-human-centered-production-and-robotics-systems>

<http://www.flandersmake.be/en/projects/factories>

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.