Research Engineer for Industry 4.0 workcells

You design new assembly workcells for Industry 4.0 production environments

Industry 4.0 companies collaborate with Flanders Make to develop their smart factory production systems where robots can work safely alongside with humans. The operator is aided by digital instructions and supported using wearable information technology and assistive automation tools.

Research and design future Industry 4.0 workcells with collaborative robots
- In a team you develop the human-robot collaborative assembly workcell of the future for a real-life machine assembly line.
- The team combines expertise in optimization algorithms, robot programming, smart devices, multi-media (tablets, google glasses, augmented reality) and virtual reality.
- Your research focuses on the design of the workcell, improving efficiency and operator support (ergonomically & mentally), and complying with quality standards and cost limits.

More concretely you:
- Gather insight in the product and the assembly tasks, and understand the reality of the workplace, f.e. the degree of difficulty of operator-tasks;
- Model the optimal layout of the new assembly workplace, combining operator tasks with robot tasks;
- Optimize the design layout taking into account all aspects, f.e. cost effectiveness, lead time,…
You address the optimization challenge with a practical feel for assembly reality. You can use an existing or internally developed set of model-based design techniques to motivate your design choices.
- Coordinate the prototype realization;
- Evaluate the effectiveness of the new work cell (f.e. lead time, operator’s wellbeing);
- Regularly discuss the technological ambitions and results with the company stakeholders, both production chiefs and operators.

Creative technology engineer with a practical feel for production reality

You have
- Master or PhD in a relevant domain (industrial engineering, robotics,…);
- Preferably 5 years of experience in research or industry;
- Relevant experience in Industry 4.0 technology projects for industry environments
- Affinity with the reality of an industrial production line;
- Knowledge of simulation software (Siemens Jack&Jill, ABB Robot studio etc.) is a plus;
- Knowledge of scripting languages (Matlab and/or Python) is a plus;
You are:
- passionate about research and new technologies;
- a team player who can build sustainable relationships with all the partners and colleagues;
- empathic and interested in the operators and their wellbeing;
- eager to learn.

Offer
Flanders Make offers 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.

Workplace:
Flanders Make is working on projects in Leuven and in Lommel, with a new base in prospect in West Flanders as well. Depending on your place of residence or preference, you can work on one of our sites (flexible workplace policy) or from a satellite office in West-Vlaanderen.

Flanders Make
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

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.


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