

# Industrial IoT Software Research Engineer (Kortrijk, Leuven, Lommel)

*You will build the next generation of Industrial IoT technology and guide the leading Flemish manufacturing companies towards Industry 4.0 innovations.*

Flanders Make builds prototypes for autonomous vehicles and intelligent production systems of the future in which interconnected information systems collect and interpret huge amounts of data. We demonstrate to companies the increasing opportunities offered by digitally interconnected systems. We are doing this more and more in our own Industrial IoT Infrastructure, which we are gradually expanding.

## Job description

As an Industrial IoT Software Research Engineer, you will:

- Collaborate in a research team with expertise in software development, modelling & simulation, algorithms, concept designs, system architectures, cloud & edge computing, big data architectures and digital twins;
- Work on intelligent network systems to interconnect systems (machines, robots, AGVs and drivers-operators);
- Use software to connect edge, cloud and industrial or experimental installations;
- Ensure the connection of structured or unstructured data flows from subsystems to a planning system.

More specifically, you will:

- Create software prototypes that demonstrate the feasibility and value of smart autonomous or self-learning functions for industrial applications. For this, you will efficiently merge multiple state-of-the-art Industrial IoT technologies (*edge and cloud (PaaS/SaaS/IaaS) databases, ETL solutions, container technology, data analytics, protocols such as MQTT, OPC/UA, etc.*).
- Study new methods of connecting robots, mobots or production systems to AI algorithms (within a cloud or edge environment);
  - Enable in assembly cell-projects also the connection between IT platforms MES (Manufacturing Execution System) / ERP / MOM / LIMS / PLM, etc.
  - You might invent, develop, program and realize innovative extensions to IT platforms and the associated software architectures;
- Incorporate your developments in practical applications and test the software on a functional demonstrator – prototype assembly cell;
- Trace and present industrial challenges and new research opportunities within the scope of the Industrial IoT for production environments.

## Profile

You are:

- An analytical conceptual thinker who is keen to explore new software capabilities;

- A technology-driven software developer who likes to co-shape automation projects from concept to realisation;
- Passionate about state-of-the-art technologies that are used within the Industrial Internet of Things.

You have:

- A Master's degree in computer or engineering sciences (computer science, mechatronics...);
- At least 4 years of relevant experience in an industrial or academic context (e.g. PhD);
- Knowledge of programming languages such as C#, Python, Java, Go, .Net, etc.
- Preferably, knowledge of databases and cloud solutions and/or solutions based on MS Azure.
- A large dose of eagerness to learn:
  - *Future-proof software architectures;*
  - *Software development environments (e.g. Microsoft Visual Studio, Eclipse JDT, PyCharm);*
  - *Industrial planning software (for example: Wonderware MES, GE Plant Apps, Brighteye, Siemens SimaticIT...);*
  - *Industrial automation, instrumentation, real-time deterministic controls, SCADA.*

## Offer

- A challenging job in which you can work with experts in various domains and can use state-of-the-art infrastructure for autonomous systems, machine and vehicle dynamics, model-predictive control, data analytics and the development of software prototypes;
- An open corporate culture with short communication lines;
- Research within a multi-stakeholder context;
- An enthusiastic, international team.

## How to apply?

To apply for this job opportunity, please go to <http://jobs.flandersmake.be>.  
Complete the online application form and download your motivation letter and CV.

## Flanders Make

Flanders Make is the strategic research centre for the manufacturing industry. From our establishments in **Kortrijk**, **Lommel**, **Leuven** and **Sint-Truiden**, 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. In this way, we contribute to new products and production processes that help to realise the vehicles, machines and plants of the future.