Data Analyst Engineer for new technology applications  
(Leuven or Lommel or Kortrijk)

You use data analytics and machine learning techniques to predict machine behavior and derive the optimal settings for robots, autonomous vehicles and industrial machines.

Use computing power for high tech applications

Flanders Make research engineers are experts in developing new technologies for machines and vehicles. Automotive companies and machine builders in Flanders are looking for predictive control and data analytics for the next step to take in their innovation process.

*What if you could predict machine failure by analysing measurements?*

*Why do certain automotive parts result in better performance?*

For the development of high tech machinery (f.e. compressor, 3D printer, self-guided robot, autonomous vehicle…), you will:
- Work together in a research team that combines expertise in artificial intelligence with the operation and control of machines and vehicles;
- Take the lead in developing predictive algorithms, to process the data and derive the optimal settings of the machine (Model Based Data Analytics).

More concretely, you:
- Understand the goal of the measurement campaign and discuss how to gather relevant data with the team (f.e. temperature signals, accelerometer signals, energy measurements, failure signals,…);
- Provide structure and insight into the raw data;
- Find ways to process the flow of data;
- Use current methods of data analytics, machine learning and deep learning techniques to search for relevant connections between input signals (f.e. which environmental factors could be influencing the energy efficiency of the machine?);
- Use and Model predictive algorithms and interpret the results;
- Draw conclusions and suggest improved parameters, for better performance or to influence the energy efficiency.

Statistical mind with passion for technology

You have:
- A Master or PhD degree in Engineering (Computer Science, Artificial Intelligence, Robotics…….);
- At least 3 to 5 years of experience in an industrial or academic environment;
- Relevant experience with experimental design on a real life (non-virtual) technology application (machines, vehicles, robots…);
- Knowledge of or the ability to use a wide range of methods in data analytics, machine learning (including but not exclusively deep learning), and data
wrangling techniques, f.e. random forests, support vector machines, and (convolutional/recurrent/deep) neural networks);
- Experience with at least one machine learning toolkit (Scikit-learn, Mahout, SparkML, Caffe, Tensorflow, R, KNIME, ...) and Matlab/Octave;
- Knowledge of one general purpose programming language like Java, C#, C++;
- A mathematical and statistical mind with a touch of “Data Intuition”;
- Communication and Data Visualization skills are a plus.

You are:
- Passionate about the technology of machines and vehicles;
- Creative;
- A good communicator;
- An active listener who can build sustainable relationships.

Live the next milestone for data analytics for high tech applications
- Flanders Make gives you the opportunity to develop yourself in the network of top industrial companies, 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

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

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.