

Research Engineer Computer Vision & Machine Learning (Leuven or Lommel or Kortrijk)

From vision systems design over machine learning to deep learning, you make vision systems smarter using innovative computer vision techniques.

For a variety of real industry cases, we want to increase the intelligence and the efficiency of camera/product/production systems, for instance: *working with autonomous vehicles and self-guided robot applications, product quality inspection, sensor fusion...*

Function

You will:

- Work together in a research team with experts in control, sensing and mechanical design;
- Take the lead in adding vision capabilities to multidisciplinary mechatronic systems;
- With your background in computer vision and image processing algorithms, you will:
 - Study, design and implement computer vision algorithms (Python, C++, Matlab);
 - Engineer feature extraction methods and decision systems, both rule- and machine learning based;
 - Train and deploy classifiers and strengthen the system with deep learning algorithms;
 - Use leading computer vision libraries (*OpenCV, dlib, ImageJ/Fiji, Halcon*);
 - Choose the right optics, lenses, illumination, imaging sensors and computing platforms for the challenge;
- Perform camera calibration and implement stereo/3D imaging architectures;
- Prepare functional prototypes and demonstrators.

Profile

You have:

- A Master or PhD in computer vision or another relevant domain (Electronic/Mechanical Engineering, Computer Science/Information Technology, Robotics, Mathematics or Physics...);
- Preferably 5 years of experience in research or industry;
- Experience in designing computer vision algorithms;
- Familiarity with leading computer vision libraries (*OpenCV, dlib, ImageJ/Fiji*);
- A thorough understanding of machine learning methods and associated software libraries (*scikit-learn, pandas, numpy, scipy, weka, Keras, Tensorflow*);
- A keen interest in designing and implementing computer vision set-ups (*cameras, imaging sensors and technologies, system-on-chip and other computing platforms*).

You are:

- Open-source software minded, have a good familiarity with Linux systems;
- Passionate about research and new technologies;
- Result-oriented, responsible, self-directing;
- Open-minded;
- Pro-active and taking initiative;
- Eager to learn.

Offer

- Flanders Make offers you the opportunity to develop yourself in a network of top industrial players, universities and research institutes;
- An open-minded, flexible and challenging work environment;
- A warm atmosphere and top colleagues;
- An attractive salary with fringe benefits.

Depending on your place of residence or preference, you can work in our offices in Leuven, Lommel or Kortrijk (flexible workplace policy).

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. In 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

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.