Data & Al Competence Centre



At the Data & Al Competence Centre, scientists combine substantive knowledge with innovative data science techniques. Head of the center of expertise Dr. Bart Buelens explains how your company can use data in an innovative and maximally profitable way.

We use a data-driven, multidisciplinary approach to develop innovative digital products and services.

VITO Center of Expertise Active in Hightech / Digital, Health & Environment

"The Data & Al Competence Centre combines modern statistics with advanced ICT technologies and state-of-the-art knowledge of the field. We develop and manage database structures and sophisticated software. While a traditional scientific approach is based on insight into physical processes to build products or services, we start from data.

The Data & Al Competence Centre supports your company with Al

applications in its own business environment. We use a data-driven, multidisciplinary approach to develop innovative digital products and services, for example for preventive health or medical image recognition. To achieve this, we use artificial intelligence, algorithms, machine learning, data management and powerful computing platforms. We also manage VITO's 'high performance cluster', its own supercomputer that can be used for collaboration with companies.

Our expertise center is the connecting factor between the VITO research themes of Health, Energy, Materials, Chemistry and Land Use. Whatever the data-related challenge, we always work together with internal experts in these domains.

Over the years, we have built up a great deal of substantive knowledge and expertise at VITO. By combining this with the vast array of research data that we and our partners have at

our disposal, we can bridge the gap between technology and society. For example, in the 'We Are' project, we are developing an ecosystem together with our partners around citizen-driven data management in the health sector."

Would you like to call on the expertise of the Data & Al Competence Centre? Please contact Dr. Bart Buelens.



Data & Al Competence Centre is ...

Artificial intelligence · Algorithms · Machine learning · Software · Data architecture · Supercomputer · Data platforms · Data spaces · FAIR data (Findable, Accessible, Interoperable and Reusable)

The added value of the collaboration with the Data & Al Competence
Centre is their strong scientific expertise, a real drive to work on preventive healthcare and a combination of their interest in health with innovation to use data in such a way that they actually do the work for you.

Quote from Domus Medica Antwerpen

Research groups and expertise

The Data & Al Competence Centre has a continuously growing, multidisciplinary team of data specialists with expertise in the areas of:

- artificial intelligence (algorithms) and machine learning
- data management, storage and processing
- calculation platforms

The Data & Al Competence Centre collaborates with researchers within the VITO research themes and theme areas for all its projects.

We have an extensive network to which we can direct companies, such as the Flanders AI Research Program, the European Digital Innovation Hub, Agoria and SIRRI.

The Data & Al Competence Centre has extensive experience with various (European) funding programs for research and innovation.

Collaboration is possible through ...

 $\label{lem:contract} \textbf{Contract research} \cdot \textbf{Research projects} \cdot \textbf{Training (seminars or master classes for companies)} \cdot \textbf{Doctorates} \cdot \textbf{Bachelor's theses and Master's theses}$



Contact Data & Al Competence Centre

Dr. Bart Buelens
VITO Head Office Mol
+32 14 33 54 72
bart.buelens@vito.be
vito.be/en/technology-group/data-science

Unique features of our equipment

The Data & Al Competence Centre is responsible for managing VITO's 'high performance cluster', a central supercomputer that works with GPU hardware acceleration that is highly suitable for projects requiring a lot of computing power.

In addition, we work closely with the Flemish Supercomputer Center and can use their infrastructure and facilities for projects.

The software and digital architecture that we develop can also be used by companies in the context of collaborations or joint projects.