

HEC Liège is looking for a PhD student (M/F) in Operations Management and Business Analytics

(ref. HEC-DL18006)

The **HEC Digital Lab** is the transdisciplinary centre of excellence, within HEC Liège, spearheading research & education in digital technologies. It now starts an important project on the digitalization of the industry, sponsored by leading industrial companies. In this context, it is now looking for a PhD student to work for an industry-sponsored PhD research project.

The project will fall within the realm of production management, mathematical programming, and operational research methods. Specifically, the project seeks to (i) **optimize the resource allocation and worksharing process for the manufacturing operations**, and to (ii) **improve the profitability of machined part portfolio through advanced data analytics**. The project has direct application in the managerial world. Indeed, this research problem has been defined in partnership with **Sonaca Group**, an aerospace company active in aerospace services and products, serving clients like Airbus, Boeing and Embraer just to name a few. Sonaca Group has a global footprint with manufacturing plants located in the US, Canada, Brazil, and Belgium.

ABOUT HEC LIEGE

HEC Liège is the management school of the University of Liège, AACSB and EQUIS accredited. HEC Liège is one of the leading Belgian university business schools for graduate and postgraduate programs with more than 115 full-time faculty members and researchers and more than 2700 students. HEC Liège is a dynamic institution that heavily promotes an active pedagogy leading students to contribute actively to their own education. The international vision of HEC Liège translates into multiple research activities in management and economics, numerous partnerships with worldwide companies and universities, and growing internationalization of its programs and faculty.

HEC Liège is located in Liège, Belgium's third largest city, and the largest agglomeration of the French-speaking Walloon region. At the heart of Europe, Liège is the third inland port of Europe and the seventh freight airport in Europe. Recognized for its quality of life and its rich historical heritage, Liège is ideally situated within the Meuse-Rhin Euregio, 30 km from Maastricht (the Netherlands) and 60 km from Aachen (Germany). It is less than 1.5 hours away from Cologne, 2.5 hours from Paris and 4 hours from London by high-speed train (TGV) starting from the new magnificent train station designed by the renowned architect Santiago Calatrava.

JOB DESCRIPTION

The candidate's main task will be to prepare a doctoral thesis in the field of operational research. As a full-time PhD student and junior researcher at HEC Liège, you will be affiliated to the strategic research field **Supply Chain Management & Business Analytics** as a member of the research centre **Quantitative methods and Operations Management** (QuantOM).

There is no teaching load associated to this position. You will attend a doctoral program offered by HEC Liège in collaboration with Belgian partner universities. Presence at Sonaca (Charleroi) and regular interaction with the sponsor's team of practitioners is expected. You will also represent the HEC Digital Lab and QuantOM in the international scientific community through (for instance) participation in scientific conferences and workshops.

YOUR PROFILE

- You have a Master's degree in business engineering, management science, applied sciences, information systems, computer science, industrial engineering, civil engineering, mathematics, operational research, business analytics, ... (with eventually a focus on at least one among the following areas: operations management, operational research methods, , data mining and machine learning)
- You have a keen interest in digital technology applied to the industrial sector (Industry4.0)
- You have prior experience in managing a research project and an interest for starting a PhD thesis
- You have experience in quantitative data collection and analysis (e.g., making use of software and tools like CPLEX, Gurobi, SAS, SAP, and programming languages like Julia, C++, Java, R, MATLAB)
- You are ready to collaborate with an international industrial company
- You have good communication skills
- You are fluent in English. Some knowledge of French is a plus
- Prior work experience within an industrial company or in the aerospace sector is a plus

CONTRACT

This is a full-time position for four years (one year + three years after receiving a positive evaluation). The salary will be set according to the doctoral student salary scale of the University of Liège under grant holder status (i.e., approximately 2.100 € net per month, fixed over the entire period, including all types of expenses). The candidate will start on September 2019.

APPLICATION PACKAGE

To be valid, the application must be duly completed and accompanied by all the below mentioned documents. Incomplete applications will be automatically rejected.

- Cover letter showing your motivation and eligibility for the position;
- CV showing your past experience and expertise in the area;
- An example of your written academic work;
- A copy of your undergraduate and postgraduate degrees;
- A recommendation letter, to be sent directly by the person recommending you.

Interested candidates should send their application by email to Dr. Nicolas NEYSEN, Digital Transformation Lead and Head of HEC Digital Lab (nicolas.neysen@uliege.be), with Prof. Yasemin ARDA (yasemin.arda@uliege.be) and Prof. Thierry PIRONET (thierry.pironet@uliege.be) in copy.

Applications should be received **before June 26, 2019**.

Further information can be obtained by sending an email to Dr. Nicolas NEYSEN.

USEFUL WEBLINKS

About HEC Liège: <http://www.hec.ulg.ac.be/en/home>

About HEC Digital Lab: <http://www.digitallab.be>

About QuantOM: <http://www.quantom.hec.ulg.ac.be>

About Sonaca Group: <https://www.sonaca.com>