

POSTDOCTORAL POSITION FORMALIZING THE CONTEXT OF DATA SCIENCE IN DATA INTEGRATION PROCESSES (M/F/X) AREA: COMPUTER SCIENCE START DATE: 2024-09-01 (NEGOTIABLE) DEADLINE: 2024-05-17

Located in the French-speaking part of Belgium, the University of Liège welcomes nearly 27,000 students of 123 different nationalities in a dynamic, multicultural city less than an hour away from Brussels and Cologne, two hours from Paris and three hours from London and Amsterdam. ULiège is spread across 4 campuses and boasts over 5,700 staff members, including 3,600 teachers and researchers active in all areas of the humanities and social sciences, science and technology, and health sciences.

As a key player in social change and environmental awareness, ULiège promotes ethical, transdisciplinary and open science. It contributes to the socio-economic development of its region through numerous partnerships with several institutions, including the university hospital (CHU). Given its international orientation, the University participates [in the European University of Post-Industrial Cities \(UNIC\)](#) initiative and has one of the most extensive collaborative networks in the world.

ULiège offers attractive career prospects [in a high-quality working environment](#) where well-being, diversity and equality of opportunity are promoted. Since 2011, ULiège has been proud to display the European [Human resources strategy for researchers](#) (HRS4R) label, which reflects its commitment to open, transparent and merit-based procedures. In addition, it upholds quality and diversity in line with the recommendations of the [Coalition for Advancing Research Assessment](#) (CoARA). ULiège encourages its academic staff to travel internationally and welcomes international researchers through its EURAXESS center.

ABOUT THE PROJECT

This research project is embedded in a cutting-edge research team at the Data Representation and Engineering Lab, nestled within the [Montefiore Institute of the University of Liège](#), led by Prof. Christophe Debruyne and is named "Introducing Context-Awareness in Data Integration Processes for Data-driven Projects with Knowledge Graphs" (CADIKG). In this project, you will have a chance to be at the forefront of innovation as we delve into the intricate realms of data integration from diverse perspectives: data engineering, data science, and data governance. The CADIKG project is not just about data but about formalizing the context surrounding these angles and building intelligent models or agents that use that context to drive data integration processes.

JOB DESCRIPTION

The postdoctoral researcher will conduct research on *formalizing the context of data science in data integration processes* in CADIKG. The candidate either has a strong track record in

knowledge graphs and a keen interest in data science or has expertise in data science and is interested in developing expertise in knowledge graphs. Preference will be given to candidates with an excellent track record of peer-reviewed publications. Responsibilities include conducting novel research, publishing in reputable conferences and journals, and contributing to developing innovative solutions. The candidate should possess excellent programming skills and a deep understanding of theoretical concepts.

SPECIFIC DUTIES & ACTIVITIES

- ▶ Conduct field and desk research.
- ▶ Complete the doctoral program.
- ▶ Formalize the context of data science in data integration.
- ▶ Propose methods and tools for using context models in data integration tasks.
- ▶ Attend meetings and collaborate with others in the CADIKG project.
- ▶ Design and conduct experiments.
- ▶ Disseminate research findings in conferences and journals.
- ▶ Mentor graduate students.
- ▶ Develop a research agenda (and contribute to funding acquisition).

PROFILE

○ REQUIRED SKILLS:

- ▶ Hold a PhD in a relevant discipline.
- ▶ Demonstratable expertise in knowledge graphs OR data science. (*)
- ▶ Demonstratable ability to develop (prototypes).

○ DESIRABLE SKILLS:

- ▶ Knowledge of graphs OR data science. (*)

○ SOFT SKILLS:

- ▶ Collaborative and interactive spirit, but able to work independently.

○ LANGUAGES:

- ▶ Proficiency in the English language, both written and oral.

(*) The candidate has, ideally, demonstratable knowledge in either knowledge graphs or data science, which is (desirably) complemented with (demonstratable) knowledge in the other.

TERMS OF EMPLOYMENT

- ▶ **Type of contract:** full-time
- ▶ **Contract duration:** 1 year with the possibility of a renewal of 1 year.

► **Expected start date:** September 1, 2024 (at the latest)

OUR OFFER

The postdoctoral position offers a competitive compensation package. With your career path and personal details, the ULiège Human Resources Department can assess the gross monthly salary. Employment benefits such as reimbursement of public transportation fees, and access to [a variety of training](#) opportunities are also included.

► WORK ENVIRONMENT

The [Montefiore Institute](#) is both the Department of Electrical Engineering and Computer Science of the University of Liège, and the associated Research Unit. Its mission is to provide high-quality education at the Bachelor's, Master's, and Doctoral levels, to conduct leading international research in selected areas of electrical engineering and computer science, and to be a driving force in turning research results into an industrial activity.

HOW TO APPLY

Please send the following documents in PDF to c.debruyne@uliege.be **by 2024-05-17**.

- Cover letter
- CV
- PhD diploma and transcripts, including a certified English translation if they are not in French
- List of publications
- Examples of academic writing (e.g., Ph.D. thesis)
- References or letters of recommendation (optional)

SELECTION PROCEDURE

The application deadline is May 17, 2024, at 11:59 PM CET.

Applicants will only be considered if they meet the eligibility criteria described above.

Applicants will be assessed and shortlisted for interviews, expected to occur in May-June. All candidates will be informed of the outcome of their application.

Our corporate policy is based on diversity and equal opportunity. We select candidates on the basis of their skills and do not discriminate on grounds of age, sexual orientation, origin, beliefs, disability or nationality.

CONTACT DETAILS AND FURTHER INFORMATION

Informal inquiries about the project are welcome. Please feel free to contact Prof. Christophe Debruyne by email c.debruyne@uliege.be.

Release date: 04/23/2024

Privacy policy

Personal data collected following your application will be processed by Christophe Debruyne of the University of Liege for the sole purpose of recruitment.

The data will be processed within the framework of pre-contractual measures (art. 6-1, b. of the General Data Protection Regulation) and kept for up to 9 months after the publication of the vacancy. Your personal data will not be passed on to any third parties.

In accordance with the provisions of the GDPR (EU 2016/679), you may exercise your data protection rights (right of access, rectification, erasure, restriction, and portability) by contacting ULiège Data Protection Officer (dpo@uliege.be - Mr. Data Protection Officer, Bât. B9 Cellule "GDPR", Quartier Village 3, Boulevard de Colonster 2, 4000 Liège, Belgium). You may also lodge a complaint with the Data Protection Authority (<https://www.autoriteprotectiondonnees.be>, contact@apd-gba.be).