

Contract Type: Fixed Term Contract |

18 Month

## Research Associate (Postdoc) in Reduced Order Modelling for urban wind flows

SnT is a leading **international research and innovation centre** in secure, reliable and trustworthy ICT systems and services. We play an instrumental role in Luxembourg by fueling innovation through research partnerships with industry, boosting R&D investments leading to economic growth, and attracting highly qualified talent.

We're looking for people driven by excellence, excited about innovation, and looking to make a difference. If this sounds like you, you've come to the right place!

### Your Role...

The successful candidate will join the LEGATO team led by Prof. Stephane Bordas by contributing to the "Data-Driven Approach for Urban Wind Energy Harvesting - DATA4WIND" project granted by Luxembourg National Research Fund (FNR). It is expected for the candidate to perform following tasks:

- Performing systematic literature review on possible reduced modelling techniques (including meta-models and artificial neural networks) with direct application in wind engineering
- Implementing different model reduction approaches in the Reduced Order Modelling tool
- Testing developed tool for wind flow over urban location based on the experimental and computational fluid dynamics data sets
- Exploring the use of a developed reduced modelling tool for urban comfort studies
- Disseminating results through scientific publications
- Preparing project deliverables and reports

### Your Profile...

- A PhD degree in Computer Science, Engineering or a related field
- Competitive research record in one of the following areas: Reduced Order Modelling (including meta-models and artificial neural networks) and/or Computational Fluid Dynamics
- Relevant knowledge of Wind Engineering will be treated as a benefit
- Strong development skills in Matlab, Python and/or C++
- Documented research experience in a number of the aforementioned topics
- Commitment, team working and a critical mind
- Fluent written and verbal communication skills in English are mandatory

### Here's what awaits you at SnT...

- **Exciting infrastructures and unique labs.** At SnT's two campuses, our researchers can take a walk on the moon at the LunaLab, build a nanosatellite, or help make autonomous vehicles even better
- **The right place for IMPACT.** SnT researchers engage in demand-driven projects. Through our Partnership Programme, we work on projects with more than 45 industry partners
- **Be part of a multicultural family.** At SnT we have more than 60 nationalities. Throughout the year, we organise team-building events, networking activities and more

[Find out more about us!](#)

### In Short...

- Contract Type: Fixed Term Contract 18 Month
- Work Hours: Full Time 40.0 Hours per Week
- Location: Belval
- Job Reference: UOL04076

### How to apply...

Applications, written in English should be submitted online and should include:

- Curriculum Vitae (including your contact address, work experience, publications)
- Cover letter indicating the research area of interest and your motivation
- A research statement (max 1 page)
- Contact information for 3 referees

All qualified individuals are encouraged to apply.

Early application is highly encouraged, as the applications will be processed upon reception. Please apply formally through the HR system. Applications by Email will not be considered.

The University of Luxembourg embraces inclusion and diversity as key values. We are fully committed to removing any discriminatory barrier related to gender, and not only, in recruitment and career progression of our staff.

### About the University of Luxembourg...

The **University of Luxembourg** aspires to be one of Europe's most highly regarded universities with a distinctly international and **interdisciplinary character**. It fosters the cross-fertilisation of **research and teaching**, is relevant to its country, is known worldwide for its research and teaching in targeted areas, and is establishing itself as an innovative model for contemporary European Higher Education. The University's core asset is its well-connected world-class academic staff which will attract the most motivated, talented and creative students and young researchers who will learn to enjoy taking up challenges and develop into visionary thinkers able to shape society.

### Further information

For further information, please contact [Anina.Glumac@uni.lu](mailto:Anina.Glumac@uni.lu)