PhD Vacancy in Photogrammetry and Computer Vision (m,f,d)

The **University of Luxembourg** is an **international research** university with a distinctly **multilingual** and **interdisciplinary** character. The University was founded in 2003 and counts more than 6,700 students and more than 2,000 employees from over 90 nations from around the world. Times Higher Education ranks the University of Luxembourg #3 worldwide for its “international outlook,” #20 in the Young University Ranking 2021 and among the top 250 universities worldwide.

The Faculty of Science, Technology and Medicine (FSTM) contributes multidisciplinary expertise in the fields of **Mathematics**, **Physics**, **Engineering**, **Computer Science**, **Life Sciences** and **Medicine**. Through its dual mission of teaching and research, the FSTM seeks to generate and disseminate knowledge and train new generations of responsible citizens, in order to better understand, explain and advance society and environment we live in.

The **Department of Engineering** (DoE) is a multidisciplinary department within the Faculty of Sciences, Technology, and Medicine. The Department of Engineering covers a wide range of engineering fields, including civil, electrical, mechanical engineering, and geodesy and geospatial engineering. Its primary objective is to develop technological solutions and promote sustainable and economical resource utilization. The Department aims to provide the necessary expertise to meet the technological demands of Luxembourg and the Greater Region's industrial and public sectors. Overall, the DoE is committed to advancing engineering knowledge and promoting the application of technology in a manner that aligns with sustainability, resource efficiency, and the needs of industrial and public actors in the region.

The University of Luxembourg (Uni.lu) is seeking to hire a **Doctoral candidate (PhD candidate)** with specialization in **Photogrammetry and Computer Vision** within the Department of Engineering of the Faculty of Science, Technology and Medicine. The position is under the supervision of **Prof. Dr. Felicia Norma Rebecca Teferle,** Head of Geodesy and Geospatial Engineering.

Your Role...

The successful candidate will join a strong and motivated research team to pursue the PhD degree in Engineering Sciences in the field of Geodesy and Geospatial Engineering and work on the topics:

- Establishment of a VR/AR training tool for emergency response teams and the public in case of flooding
- Collaboration with international scientists and emergency response teams in a EU-funded project
- Carrying out research in the fields of photogrammetry, computer vision, geospatial informatics, sensor integration
- Participating in research proposal drafting and project deliverables
- Disseminating results through scientific publications, conference presentations, workshops and outreach activities
- Assisting in organization of relevant workshops and demos nationally and internationally
- Participate in the research, education, and training activities: Bachelor, Master, and PhD programs

What we expect from you...

Qualification: The candidate must possess a Master of Science (MSc) degree in Geospatial Engineering, Photogrammetry and Remote Sensing, Geospatial Informatics or equivalent. Applicants with a computer science background will also be considered as well as Mathematicians.

Experience: The ideal candidate should have knowledge and motivation in a number of the following topics:

- Photogrammetry and computer vision methods, their applications and limitations
- Processing and analyses of geospatial data (imagery, video and point clouds)
- VR/AR kits, related sensors and technologies, as well as their integration
- Versatile in using both commercial and scientific related software and tools
- Reality capture using scanning and imaging
- Surveying and mapping
- 3D engines for generating virtual experiences/visualizations
- Coding in one or more languages, e.g. C/C++, Fortran, Java, Python, R
- Skills to create charts, diagrams and graphics

- Oral and written competences in English are mandatory; good competences in French or German are highly beneficial, Luxembourgish is an extra bonus
- Excellent communication and inter-personal skills
- Ability to work in a multidisciplinary and multicultural team

How to apply…

Applications should include:

- Curriculum Vitae
- Cover letter

We ensure a full consideration for applications received by 30 June 2024. Please apply ONLINE formally through the HR system at UL Recruitment. 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, ethnicity and cultural background, in recruitment and career progression of our staff.

General information:

- Contract Type: Fixed Term Contract 36 Month (extendable up to 48 months if required)
- Work Hours: Full Time 40.0 Hours per Week
- Employee and student status
- Location: Kirchberg
- Job Reference:

The yearly gross salary for every PhD candidate at the UL is the same and is highly competitive.

For more information and details about proposed research topics, please contact Professor Rebecca Teferle (rebecca.teferle@uni.lu).

In return you will get…

- **Multilingual and international character**. Modern institution with a personal atmosphere. Staff coming from over 90 countries. Member of the “University of the Greater Region” (UniGR).
- **A modern and dynamic university.** High-quality equipment. Close ties to the business world and to the Luxembourg labour market. A unique urban site with excellent infrastructure.
- **A partner for society and industry**. Cooperation with European institutions, innovative companies, the Financial Centre and with numerous non-academic partners such as ministries, local governments, associations, NGOs …

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