



**UNIL** | Université de Lausanne  
Faculté des géosciences et de l'environnement  
Décanat - 4608  
bâtiment Géopolis  
CH-1015 Lausanne

## **Assistant Professor (tenure track) in Geo-Environmental Data Science**

### **Introduction**

The University of Lausanne is a higher teaching and research institution composed of seven faculties where approximately 15,000 students and nearly 5,000 employees, professors, and researchers work and study. Ideally situated along the Lake of Geneva, near Lausanne's city center, its campus brings together over 120 nationalities.

### **Presentation**

The Faculty of Geosciences and the Environment (FGSE) of the University of Lausanne invites applications for a professorship in geo-environmental data science, to be based in the Institute of Earth Surface Dynamics (IDYST).

We are looking for a scientist at the intersection of data science and geo-environmental science who complements current strengths of the FGSE. As far as data science, we seek someone able to develop methods/algorithms (such as machine learning, geostatistics, geocomputing, geomodelling, etc.) and tailor them to particular large spatial/temporal datasets or big data. As far as geo-environmental science, the person is expected to analyse and predict the dynamics of the earth surface-environmental system (such as hydrology, geomorphology, vegetation distribution, climate, environmental data time series, soils, etc.). The appointed person will teach GIS along with other geo-environmental data science courses.

### **Information**

Appointment will be at the Assistant Professor level (tenure track). However, exceptionally, we will consider outstanding candidates for direct appointment to the Associate Professor level, notably if this corresponds with our equal opportunity objectives.

Starting date: August 1st, 2021 (or to be agreed upon)

Contract length: 2 years renewable twice (6 years). Tenure and promotion to the rank of Associate Professor expected after 5-6 years, leading to further contracts renewable every 6 years.

Activity rate: 100 %

Workplace: Lausanne campus (Géopolis building)

### **Your Responsibilities**

The successful candidate is expected to *i)* develop a competitive research program within the Institute of Earth Surface Dynamics, *ii)* teach courses in the Bachelor of Geosciences and Environment, and Masters programs taught by the FGSE, and, *iii)* supervise masters and doctoral students.

### **Your Qualifications**

Candidates must demonstrate a capacity to undertake quality research, to obtain competitive research funding, and to publish in peer-reviewed international research journals. A demonstrated potential for teaching GIS, best practice programming skills, data science applied to geo-environmental problems, or algorithms is highly desirable. In addition, the candidate has demonstrated potential for supervising master's and doctoral theses.

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A good command of both French and English language is preferable. If French is not the native language, teaching ability in French has to be acquired within two years of the appointment.

### **What the position offers you**

The Faculty of Geosciences and the Environment (FGSE) of the University of Lausanne was created in 2003 and offers state-of-the-art field and laboratory equipment (e.g., XRD, RockEval, Carlo Erba, SEM, mercury and phosphorus analysis, stable isotopes, compound specific-light isotopes, clumped isotopes, XRF, SIMS and NanoSIMS, Luminescence dating, LA-ICPMS, ICP-OES, Electron Microprobe, X-Ray tomography, GPU and CPU-based supercomputing facilities, remote sensing equipment including a drone lab, as well as instrumented field sites), incentives for projects, and excellent working conditions (<https://www.unil.ch/srh/home/menuinst/infos-administratives/donnees-salariales.html>). It consists of three research institutes (Earth Sciences, Geography and Sustainability, and Earth Surface Dynamics) and a School that manages teaching and training across these research domains. The FGSE specifically promotes interdisciplinary research and teaching, within and between the social and natural sciences.

### **Contact for further information**

Other useful information is available on the websites of the Faculty ([www.unil.ch/gse](http://www.unil.ch/gse)) and the Institute of Earth Surface Dynamics ([www.unil.ch/idyst](http://www.unil.ch/idyst))

Interested candidates are strongly urged to contact the Chair of the selection committee for this position: Christian Kull, Vice-Dean of the FGSE, and Professor in the Institute of Geography and Sustainability ([christian.kull@unil.ch](mailto:christian.kull@unil.ch)).

### **Application deadline: October 4th, 2020 (23:59 Swiss time GMT+2)**

**The PDF application must be shared in several documents not larger than 9.9 MB and can only be submitted through this website:**

**<https://bit.ly/2RqY98H>**

**Or [www.unil.ch/central/en/home.html](http://www.unil.ch/central/en/home.html) -> Careers at UNIL -> Emplois -> Postes ouverts -> English -> Keywords Data science (or ad 16162)**

and should include:

- . a cover letter, addressed to the Dean, explaining the reasons for applying (max. 1 page);
- . a full Curriculum Vitae, including previous employment and university training, the date and title of the doctoral thesis, publications, conference presentations / invited lectures, classes taught, and student research supervised;
- . a research statement, describing the research the candidate intends to develop (max. 4 pages);
- . a teaching statement, describing the candidate's teaching approach, intentions for teaching and his or her potential contribution to our teaching programs (max. 2 pages);
- . PDFs of the five most relevant publications;
- . the names and contact information of five referees.

### **Additional information**

The University of Lausanne seeks to promote an equitable representation of men and women among its staff and strongly encourages applications from women. The FGSE's strategy regarding equal opportunity, specifically with respect to the recruitment of professors, is described in point 2.2 of the FGSE's Plan of action in favor of the equality of chances between women and men 2017-2020.

Candidates are expressly invited to consult this document at the following website:  
<https://www.unil.ch/gse/fr/home/menuinst/faculte/commissions/egalite.html>

The Faculty of Geosciences and Environment of the University of Lausanne adheres to the DORA (<https://sfdora.org/>) agreement and follows its guidelines in the evaluation of applications.