As a key player in research and innovation in Luxembourg, the Luxembourg Institute of Science and Technology (LIST) covers the domains of materials, environment and IT. As an RTO (Research and Technology Organisation) and with its interdisciplinary impact-driven approach, LIST contributes to the development of Luxembourg’s economy and society.

Software Engineer in Geoinformatics (M/F)

Ref: 2016-061_ERIN_ESCIENCE-SECUTOP fixed-term contract

Context of intervention

The successful candidate will join the “Environmental Research and Innovation” (ERIN) department. With a team of more than 170 scientists and engineers from life science, environmental science, and IT science, the department has the necessary interdisciplinary knowledge and skills to tackle major environmental challenges our society is facing today: climate change mitigation, ecosystem resilience, sustainable energy systems, efficient use of renewable resources, environmental pollution prevention and control.

The "Environmental Research and Innovation" (ERIN) department of LIST has an opening for a Software Engineer position in the field of Geoinformatics and Geocomputation in the framework of the projects SECuRe “Smart Energy City and Region”, an ENOVOS funded interoperable urban energy analytics and decision platform and Proba-V Topbox an ESA funded interoperable big data analytics platform for Proba-V satellite imagery.

The engineer will be integrated in the e-Science unit, which focuses on data analytics & visualisation and their application to environmental and biological sciences.

Projects and main missions

- In the SECuRe project the candidate will implement existing algorithms for distributed computing for renewable energy potentials; implement the modules as python-based web processing service (PyWPS 3.0 and 4.0) in the existing Smart City and Region platform and iGuess software framework; further develop interactive data visualisation tools

- In the Topbox project the candidate will implement space-time analysis algorithms for remote sensing imagery in Python, R and C as interoperable WPS into the existing iGuess software framework using Spark, Geotrellis; implement some interactive spatio-temporal data visualisation tools

More information on list.lu/jobs
Profile

Education

Master’s Degree in Computer Science with specialisation in GeoInformatics, Geocomputation, Computational Geography and/or GIS

- You have strong programming experience in operational/production systems
- You are open minded and think interdisciplinary
- You are creative, a team player and have proven organizational skills

It is considered a plus to have worked in a team which has undertaken research or developed a new product although this is not a requirement

Competencies

- Strong background and experience in R, Python, C, OGC web services, Spatial SQL, GIS and Web development is mandatory
- Experience in PyWPS, Django, OpenLayers 3, Bootstrap, Jquery, D3js, MapServer, Geoserver, pycsw is a plus
- Software development methodologies (RAD, Agile, Waterfall or Iterative for example) are desirable
- Version Control systems (git, svn)
- Knowledge in Spark, Geotrellis, (Geo-) Statistics for big geodata analytics is of advantage

Language

- Proficient spoken and written knowledge of English is mandatory. Proficiency of at least one of the official languages of the country is an asset (French, German or Luxembourgish)

Contact

Candidates interested in the above position can apply online on our website: www.list.lu

The application file should include:

- a CV
- a motivation letter
- reference contact(s) / letter(s) of recommendation
- any other document you may think useful to be considered in your application file