Building Simulation Software Engineer position at smart living lab

EPFL is seeking an enthusiastic and experienced candidate with a proven track record of achievements in software engineering to staff up its Building2050 research group and support its activities.

The Building2050 research group concentrates its activities on building’s energy and carbon lifecycle performance, including occupant behavior. With an interdisciplinary approach, we consider the whole building as a system and takes a user-centered point of view. Bearing in mind all interactions between comfort and performance, we specifically focus on the early building design phases.

Position Description:
In this role, you will be contributing to the implementation of software prototypes, using energy-related Building Performance Simulation (BPS) tools, and deploying data science workflows. Specifically, you will be expected to:

- Understand and implement workflows developed by researchers into software prototypes
- Use BPS tools (including development of scripts) and statistical analysis techniques
- Interact with scientific teams for the definition of requirements and specifications of the software prototype

Qualification and experience (preferred skills):

- Expertise in Python (with advanced programming skills)
- Strong knowledge of BPS tools for energy (EnergyPlus, TRNSYS...)
- Parametric analysis experience: conversion of IDF/IMF and weather files, management of simulation data

Experience in any of the following areas would be a plus:

- Experience in multiprocessing and cloud computing
- Knowledge in statistical analysis (R), data mining

Profile:

- Master degree in software or computational engineering, or in mechanical engineering with a strong background in computer science. Experience with statistical analysis (R) would be a plus
- 2 years of experience in software development of BPS Tools
- Fluent in English (written and spoken). French would be a plus

Candidates must also demonstrate strong affinities for interdisciplinarity, a capacity for synthesis and an interest for bridging research and practice.

Working conditions
The position is based at the EPFL Fribourg satellite campus, Switzerland within the smart living lab, in a young, dynamic, inter-disciplinary, and international working environment. You will be located at around a ten-minute walk from Fribourg train station.

We offer:

- A stimulating cross-disciplinary environment in a leading university,
- Opportunities for turning academic research into impactful solutions,
- Start date: as soon as possible,
- Duration of contract and activity rate: 1 year, renewable. Full time (100%),
- EPFL aims to increase the presence of women amongst its faculty, and qualified female candidates are strongly encouraged to apply.

Procedure for application
Candidates should send their application before July 31, 2017 through email to veronica.cubarle@epfl.ch with the following:

Subject: BUILDING2050 - Software Engineer application.
Enclosure: your resume (CV), a letter of interest (with statement of your motivation), as well as the contact information of three references (name, job title, business address, and email address).