Seismologist for Rapid Earthquake Damage Estimate

Enterprise:

The EMSC is a scientific NGO and one of the top global earthquake information centres. It operates websites and a suite of innovative tools called LastQuake, which include a smartphone app and a Twitter quakebot.

It has been pioneering the field of “citizen seismology” and also offers scientific data services to the seismological community.

EMSC is hosted by the French Atomic Commission in the south of Paris. Its premises are accessible from Paris and its region thanks to free bus lines.

The candidate will have to obtain a security clearance, a requirement from EMSC’s host. The delays are typically 2 to 3 months for EU nationals but can reach 9 to 12 months for other nationalities. In addition, non EU nationals also require a work permit.

Post description:

The candidate will work for the H2020 project SERA (Seismology and Earthquake Engineering Research Infrastructure Alliance for Europe). She/he will contribute to 2 project tasks. The main contribution will be on establishing a prototype for automatic time-evolving loss estimates incorporating rapid source parameter determination, region- and fault-type specific wave attenuation models, provide continuous updates by the integration of seismic data and direct and indirect citizen-based information, and loss estimation tools. He/she will also contribute to the compilation of the results of the different SERA activities and will be the EMSC contact point for the SERA project.

The candidate will take advantage of the data collected at EMSC, including felt reports, geolocated pics, social media monitoring, and eyewitness digital footprints (e.g., location and time of users launching LastQuake app) to bring in-situ constraints on damage estimates.

The ultimate goal is to harmonize and improve the timeliness and accuracy of the shaking and damage assessments made during sequences of natural and induced earthquakes, for use by seismic agencies and European services.

The contract will cover the duration of the project (3 years), with a start mid-2017.
Qualifications:

The candidate has a PhD in seismology or engineering seismology, a demonstrated experience in programming (Python), data analysis and possibly in geostatistics and ground motion predictive equations. He/she is hard working, and interested in applied research and operational tools.

CV to be sent to Rémy Bossu bossu@emsc-csem.org