

19J019 - Student assistant (f/m/d)

Background

EIFER (European Institute for Energy Research) was established in 2001 as collaboration between the Karlsruhe Institute of Technology (KIT) and Electricité de France (EDF). Today EIFER has an international team of more than 100 researchers.

Description

The student will support work within electrification projects in developing countries. In this geographical context, reliable electrical network data is hard to obtain. The student will explore machine-learning algorithms (CNN Convolutional Neural Networks) that allow for the automatic extraction of electrical networks from satellite imagery. The project is building data sets used by energy network planning tool. At EIFER we work in different programming environments (Python, C++, Java) and combine data within spatial databases stored in environments like PostgreSQL, MongoDB or SciDB.

The job will enable the student to gain experience in electrical network development, data treatment and integration of geo-spatial models.

This work can also be performed in the framework of a 6 months master thesis or compulsory internship.

The assigned tasks involve

- Data treatment and code development
- Support for specifications for electrical networks
- Geo-spatial models development / integration

Required qualifications / skills

- Minimal understanding of Geographic Information Systems (GIS), its concepts and standards as well as associated data formats
- Basic knowledge in DB design / administration
- Programming skills, preferable in Python or SQL
- Fluent English (oral and written) is mandatory. A basic knowledge of German and/or French would be a plus

Conditions

- Duration: 6 months
- Working hours and remuneration depend on the academic level (460-Euro-Basis)
- Start: as soon as possible
- Place of work: EIFER, Emmy-Noether-Str. 11, 76131 Karlsruhe

Contact

If you want to join a highly motivated research group, **please forward your electronic application with one single pdf of max. 5MB** including all relevant information (curriculum vitae and cover letter) to jobs@eifer.org. Please refer to the **offer number 19J019**.

For additional information concerning the work please contact: Isaac Boates, Tel: +49 721 6105 1712, E-Mail: boates@eifer.org or Bruno Pechine, Tel: +49 721 6105 1741, E-Mail: pechine@eifer.org