



## Study engineer or Research engineer - Post-doc at Université Gustave Eiffel ([www.univ-eiffel.fr](http://www.univ-eiffel.fr))

### GeoTimeSpace : digital representations of *geographical time-space* to understand the dynamics of long-distance mobility



**Starting date : 05/2020 (fixed term contract 12 month)**

In the context of the project ELSAT 2020<sup>1</sup>, an axis of research deals with the changes in the mobility of persons.

Mobility is known to be influenced by representations of geographical space, including maps of different shapes, topographic, retistic (Raveau et al. 2011). One line of research focuses on the inverse relationship that seeks to understand the spatial representations of individuals in order to better understand their mobility. This stream includes a section devoted to understanding individual, social and cultural representations, mainly through interviews and surveys. Another strand aims to recreate mental representations using objective and quantified sources; this is the path we are exploring here.

We are interested here in the representations of geographical time-space. New representations of geographic space-time seek to account for their main properties - which previous representations do not allow - by means of the third dimension; this is the purpose of the GeoTimeSpace project:

- [https://github.com/theworldisnotflat/shriving\\_world](https://github.com/theworldisnotflat/shriving_world)
- <https://timespace.hypotheses.org/>

#### Mission

The mission of the study/research engineer will be to

- contribute to the conceptual development of the model
- ensure the development of the existing TypeScript project code

- produce digital outputs of the model using three-dimensional modeling tools (Blender)
- consider a study of the readability of map outputs (in comparison with other map forms)
- participate in the writing of scientific articles

This project is located at the interfaces between geography, mobility studies, cartography, scientific visualization and graphics.

#### Expected profile

The candidate must have a Master's degree or a thesis in geography, planning or computer science.

A geographer with programming (code) skills or a computer scientist with an interest in cartography may fit the profile. Skills in 3D modeling (three.js), cartography, 3D graphics (Blender) will be appreciated.

#### Recruitment procedure

Please send a CV and a letter of motivation to Alain L'Hostis (alain.lhostis@univ-eiffel.fr). The deadline for receipt of applications is **5 April 2020 (extended deadline)**.

Candidates selected following the selection of CVs will be invited for an interview.

#### Workplace

The post is based on the campus of Lille of [Université Gustave Eiffel](http://www.univ-eiffel.fr) (ex-Ifsttar), in [Laboratoire Ville Mobilité Transport](#).

<sup>1</sup> The project ELSAT2020 is cofinanced by the European Union with the European Fund for Regional Development, by the French state and the region Hauts-de-France