

PhD position in urban studies and spatial simulationRef. **GEODE-13-04****Centre for Population, Poverty and Public Policy Studies**

Public Research Centre CEPS/INSTEAD, Luxembourg

Théma Laboratory

UMR CNRS 6049 - Université de Franche-Comté, Besançon, France

Job description

Within the *Cross-border Local Mobility* unit of the *GEODE department* (CEPS/INSTEAD) and the *Mobility, City and Transport* unit of the Théma Laboratory (CNRS, Franche-Comté University), the candidate will conduct a PhD research on urban studies and spatial simulation. S/he is expected to contribute to the SMART.BOUNDARY research project funded by the FNR and the CNRS under the PICS research programme.

PhD Project Description

In the framework of the SMART.BOUNDARY project, the main objective of the PhD thesis consists in simulating residential mobility in a cross-border context, using cellular automata. It aims to show how residential mobility continuously re-organize cross-border areas and are re-organized by the border.

The research will mainly focus on the Strasbourg border region that will be compared to the Luxembourg and Besançon case studies (also included in the SMART.BOUNDARY project). To calibrate cellular automata, the PhD will develop a specific concept (e.g. direction statistics and flows) and adapt it to the border realm as an additional and innovative methodological contribution.

In terms of results, the thesis should provide clear and precise guidelines on residential household location strategies in a cross-border context. Finally, different scenarios will be constructed, implemented, compared and assessed for each case study.

Requirements

The candidate holds a Master in quantitative geography, spatial analysis and/or geomatics. The topics of interest are modeling, spatial simulation, GIS, statistics, spatial statistics. IT development will be an asset. The candidate must be fluent in English and/or French.

The candidate will work on two sites in Esch-Belval and Besançon. He must also be enrolled as PhD student at the Franche-Comté University, starting from September 2013.

Conditions of employment

Annual salary: 34000 Euros

Type of contract: Short term assignment "contrat de formation recherche"

Duration of the contract: 3 years

Expected date of start: September 2013

Application

Please send your CV, a cover letter and copies of diplomas certifying academic qualifications by email before the 31st of May, 2013 to:

Valérie Baran

HR manager

valerie.baran@ceps.lu

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