# PhD student in Spatial Analysis/Urban Modelling – University of Luxembourg

The University of Luxembourg has the following vacancy in its Geography and Spatial Planning Research Centre, IPSE Research Unit, Faculty of Language and Literature, Humanities, Arts and Education.

Doctoral candidate (PhD student) in Spatial Analysis/Urban Modelling (M/F)

- 3-year fixed term contract, renewable once, 40 hours/week
- Ref: F3-120008 Online Offer UOL00063
- Student AND employee status

### Tasks

- Prepare a doctoral thesis in Geography, particularly within the following fields:
  - Spatial econometrics and statistics for urban processes
  - $\circ$   $\;$  Exploratory spatial data analysis and data mining for urban data  $\;$
  - Urban simulation models (agent-based, cellular-automata, dynamic systems)
  - Urban economics
  - Landscape and urban patterns analysis
  - o Advanced computer cartography, geovisualisation and geoanalytics
- Assist in teaching activities, one to three hours per week.
- Contribute to tutoring Master students

### Profile

- Master in Geography, Urban/Regional Economics or Urban Planning, or a Master in Science (Environmental, Mathematics, Physics...) with experience in geographical issues
- Strong interest in developing/using models and quantitative methods in Social Science with geographical perspective
- Proficient in Mathematics, Statistics, and GIS/cartography
- Experience with standard statistical software (R, Stata,...) and geographical packages (spdep, geoDA, PySAL, ...) and/or mathematical software (Mathematica, Matlab, Scilab,...) and/or proven programing skills
- Interest for interdisciplinary work
- Good command of English. (Knowledge of French or German is a plus)

### Our offer

- Opportunity to participate in the development of a newly created university
- An exciting international environment
- A competitive salary
- Well-equipped research facilities

## Additional Information

- Applications (in English) should contain the following documents:
  - A detailed curriculum vitae
  - Copies of Master Diploma
  - Motivation Letter
  - o Support letter from at least one recent scientific advisor/professor
  - A phD proposal (min 2000, max 2500 words excluding bibliography) using the following format:
    - 1. Introduction and literature review
    - 2. Research objectives and expected contribution to the field
    - 3. Innovation/originality
    - 4. Methodology (including intended dataset to be used if empirical analysis)
    - 5. Work plan and expected timetable
    - 6. Bibliography

Please apply online until February 14th, 2012: http://recruitment.uni.lu/, see offer UOL00063

For further information please contact Prof. Geoffrey Caruso, geoffrey.caruso@uni.lu