



Zurich, 30 January 2015

## Open PhD position: urban classification under multiple data modalities (MMRS-2015-01)

The Multi Modal Remote Sensing unit of the Department of Geography is opening a PhD position within the project 'Multimodal Learning for Remote Sensing Information Fusion' (<http://p3.snf.ch/project-150593>). The aim of the project is to develop and promote remote sensing data processing strategies based on multiple data sources.

We therefore invite applications for a PhD position in the area of ***urban image classification under multiple data modalities***.

The student will work at the interface between remote sensing, computer vision and machine learning. The aim of the thesis is twofold: first, a classification system (semantic segmentation) based on several data modalities will be developed. Such model will encode prior knowledge about the geographical structure of the city. Second, learning under missing data modalities will be considered, to make the model robust to scenarios related to scarce and uncertain data availability.

The successful applicant will be based in Zurich and working at the University of Zurich (<http://www.geo.uzh.ch/en/units/multimodal-remote-sensing>). Supervision will be by Prof. Devis Tuia.

Upon start, applicants must have a completed masters degree in Remote Sensing, Computer Science or similar, with a high degree of specialization in remote sensing. Applicants must be able to pursue data-oriented computational research as well as to develop their own ideas into software. Good numerical skills and literacy in programming are required (Matlab and Python coding, C/C++ is an asset). A good standard of written and spoken English is required. The position may start as of September 1, 2015 and is limited to 3 years. Salaries correspond to the Swiss National Science Foundation regulations of PhD salaries.

We are looking for a highly motivated, enthusiastic and independent person with a passion for quantitative science to join our team. We offer outstanding working conditions, a high quality of life in Zurich, and an excellent supporting environment.

Please send your application (including position reference MMRS-2015-01) as one single PDF file (motivation letter, complete CV, and names of 2 references) to [Sandra.Altorfer@geo.uzh.ch](mailto:Sandra.Altorfer@geo.uzh.ch), no later than April 1, 2015. Full consideration is given to all complete applications. For further questions, please contact [Devis.Tuia@geo.uzh.ch](mailto:Devis.Tuia@geo.uzh.ch).