学术报告会

时间：**2015年3月23日(周一)10:00**

地点：**电院群楼2-410会议室**

Classification with machine learning algorithms using hyperspectral images

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Abstract:

Machine learning algorithms represent white box powerful tools easy for interpretation and highly repeatable. With increasing large data volume from remote sensing, machine learning classifiers are well-suited. This talk will discuss application of tree-based ensemble classifiers Random Forests and Adaboost with airborne and satellite hyperspectral images for ecotope classification, a real-life scenario for conservation of NATURA 2000 habitats.

Biography:

Jonathan Cheung-Wai Chan is an expert in remote sensing with a special focus on machine learning algorithms for hyperspectral analysis and detailed land cover mapping. Shortly after obtaining his PhD from the University of Hong Kong (1999), he worked as a research scientist at the Geography Department, at University of Maryland, College Park, the United States. He was involved in various NASA projects in relation to global mapping using machine learning algorithms (C5.0, Bagging, Boosting). In 2001, he was hired as a post-doc researcher at InterUniversity MicroElectronics Research Center (IMEC) at Leuven, stationed at the Department of Electronics and Informatics (ETRO), at Vrije Universiteit Brussel (VUB). He worked on European projects which applied remote sensing methods (Thermal continual measurement) for land mines detections as well as risk estimation of a mine-contaminated area using high definition multispectral images (Ikonos, images from unmanned vehicle). From 2005 to 2011, he was a Doctor Assistant at the Geography Department at VUB where he engaged in teachings at bachelor and master levels for courses relating to remote sensing and Geographical Information Science.