

URD_8

Title of the doctoral program

Urban and regional development

Title of the research activity

Innovative Methods and Approaches for 3D City Modeling Based on Mass Market System and Crowdsourcing, for Urban Planning and Cultural Heritage.

Short description of the research activity

The research is focused on the study and development of innovative methods and approaches devoted to generate a 3D city modeling, where the spatial data are collected using low cost devices or adopting a crowd sourcing approaches.

In this research, the data interoperability will be stressed, in particular the possibility to use “non-conventional ” devices (e.g. Smartphone, UAV, data sharing, social network) will be deeply analyzed.

The aims are to realize a model concerning the urban area, but with a specific focus on the cultural heritage, with the purpose to create a model addressed to the open sky museums.

Scientific responsible (name, surname, role, email)

Andrea Lingua, Associate Professor, andrea.lingua@polito.it

Number of vacancies for XXXI cycle (3 years program)

1

Specific requirements (experiences, skills)

To have already worked with GIS platform and to know the basic element of photogrammetry. GIS, Photogrammetry, image analysis, Cartography, mapping, Open Source system, Positioning, Elements of Geomatics.

Website of the research group (if any)

http://areweb.polito.it/geomatics_lab/index%20EN.html