



Training course on **Mobile and Web Mapping for cultural tourism**
(Valencia, October 17 – 29, 2016)

Date	Day	Time	Training topics	Other activities	Classroom	Responsible teachers
October 16 th	Sunday			<i>Arrival to Valencia</i>		
October 17 th	Monday	9:30-13	Basic mobile applications design	<i>Introduction (Luis A. Ruiz)</i>	<i>CFP-2.4</i>	Jesús Palomar
		15:30-17:30	Introduction to App Inventor (I)		<i>CFP-2.4</i>	Jesús Palomar
October 18 th	Tuesday	09-13	Introduction to App Inventor (II)		<i>CFP-2.4</i>	Jesús Palomar
		15:30-17:30	Introduction to App inventor (III)	<i>Welcome dinner</i>	<i>CFP-2.4</i>	Jesús Palomar
October 19 th	Wednesday	09-13	Mobile tourism application project		<i>CFP-2.4</i>	Jesús Palomar
		15:30-17:30	Mobile tourism application project		<i>CFP-2.4</i>	Jesús Palomar
October 20 th	Thursday	09-13	Ground Penetrating radar fundamentals		<i>CFP-2.4</i>	Paco García
		15:30-17:30	Ground Penetrating radar applications in CH		<i>CFP-2.4</i>	Paco García
October 21 th	Friday	09-13	Demonstration projects	<i>Visit Dept. Cartog. Eng.</i>	<i>CFP-2.4</i>	Jesús Bonet (<i>Leica</i>) José L. Lerma
October 24 th	Monday	09-13	Recording, modelling and 3D visualization of cultural resources (I)		<i>DF-lab</i>	Nikolaos Karanikolas Dimitrios Kaimaris
		15:30-17:30	Recording, modelling and 3D visualization of cultural resources (I)		<i>DF-lab</i>	Nikolaos Karanikolas Dimitrios Kaimaris
October 25 th	Tuesday	09-13	Recording, modelling and 3D visualization of cultural resources (II)		<i>DF-lab</i>	Nikolaos Karanikolas Dimitrios Kaimaris
		15:30-17:30	Recording, modelling and 3D visualization of cultural resources (II)		<i>DF-lab</i>	Nikolaos Karanikolas Dimitrios Kaimaris
October 26 th	Wednesday	09-13	Web mapping for tourism (I)		<i>CFP-2.4</i>	Jesús Irigoyen

**Higher Education interdisciplinary Reform in Tourism management and Applied Geoinformation curricula**

		15:30-17:30	Practical cases in 3D reconstruction and web mapping for CH		CFP-2.4	Albert Sierra
October 27 th	Thursday	09-13	Web mapping for tourism (II)	<i>Project management Meeting</i>	CFP-2.4	Jesús Irigoyen
		15:30-17:30	Web mapping for tourism (II)	<i>Project management Meeting</i>	CFP-2.4	Jesús Irigoyen
October 28 th	Friday	09-13	Web mapping for tourism (III)	<i>Project management Meeting</i>	CFP-2.4	Jesús Irigoyen
		17:00-21:00	Study visit: Valencia historical sites	<i>Dinner</i>		
October 29 th	Saturday	9:30-13:30	Field trip: Sagunto			
October 30 th	Sunday			<i>Departure from Valencia</i>		

Description of modules**Module 1. Introduction to App Inventor (October 17th-19th)**

Proposal: Basis of creation of mobile applications (native, web and hybrid applications). Review of all mobile components of App Inventor Web platform.

Examples of most used components in tourism. Depending on the time we have, we will develop several practical projects such as:

- Proposal one: full mobile application project using several components: image, text, html, and geolocation.
- Proposal two: Virtual reality application based on spherical photography. First step: data acquisition (using Panosaurus 2.0 panoramic head); second step: stitching process (Hugin software); third step: creation of the web virtual reality application

Module 2. Ground Penetrating radar (GPR) (October 20th)

Fundamentals. Application in cultural heritage. Practical project.

Module 3. Recording, modelling and 3D visualization of cultural resources (October 24th-25th)

Data acquisition on a monument using conventional camera (ground photogrammetry). Data processing, generation of 3D point cloud, mesh, texture (Photoscan). Uploading to 3D web platform for mobile visualization.

Module 4. Web mapping for tourism (October 26th-28th)

Proposal: developing a full web application for tourism from scratch. For that, we are going to combine different tools (HTML5, CSS, JavaScript and LeafLet) in order to get a touristic web server.