

## DEPARTAMENTO DE INFORMÁTICA

### Geographic Information and Simulation Systems

MULTIMODAL SYSTEMS / GISS and IMEDIA



### Armanda Rodrigues

GISS (PI), IMEDIA

Ph.D in GI Science, City University, UK.  
20 years experience in the field of GI, with a current focus in Spatial Simulation, Emergency Management and Web Mapping Applications

## Objectives

Addressing the limitations of existing techniques for handling and representing geographic Information in order to improve evolution, visualization, interaction and collaborative activities in information and simulation systems.

Developing representation and integration models for the generic implementation of simulation in Emergency Management Systems

Using the cartographic metaphor for exploring interaction with large amounts of data in collaborative communities.

## Methodology

Defining models and tools to enable the qualitative (visual) as well as quantitative evaluation of risk scenarios, using real data (currently instantiated in applications for flood forecast)

Developing location-based tools for the identification of mobile activities based on movement data and user profiling

Modeling productive communities with the aim of identifying their collaborative potential and spatially representing possible relationships (Proof of concept: Flickr)

## Expected Results

A roadmap for the seamless implementation of emergency management systems, in flooding contexts

A social model of potential collaborative activities in a productive context supported by an interactive visual tool

A collaborative spatial framework for the interaction and dissemination of research data and results in a scientific community, based on the developed social model (case study: Lisbon's historical religious buildings)

