



# Rosa-Maria Martin

IT TECHNICAL DIRECTOR

inLab FIB. Universitat Politècnica de Catalunya-  
Barcelona Tech

<http://inlab.fib.upc.edu/en>



## BILATERAL MEETINGS

02.03.2015 Monday (11.00h - 13.05h)

02.03.2015 Monday (13.05h - 15.10h)

02.03.2015 Monday (15.10h - 18.05h)

03.03.2015 Tuesday (9.00h - 11.05h)

03.03.2015 Tuesday (11.05h - 13.10h)

03.03.2015 Tuesday (13.10h - 15.15h)

03.03.2015 Tuesday (15.15h - 16.55h)

04.03.2015 Wednesday (9.00h - 11.05h)

04.03.2015 Wednesday (11.05h - 13.10h)

04.03.2015 Wednesday (13.10h - 15.15h)

04.03.2015 Wednesday (15.15h - 16.55h)

**DESCRIPTION** inLab FIB (<http://inlab.fib.upc.edu/en>) is an innovation and research laboratory based of the Barcelona School of Informatics at UPC, specialized in applications and services based on the latest ICT technologies. The Universitat Politècnica de Catalunya - Barcelona Tech (UPC) is a leading university in Spain in volume of research and rechnology transfer to companies, and has become one of the major hubs of knowledge in Southern Europe. The UPC is a major player in European projects-  
inLab FIB has over 30 years of experience collaborating in cutting edge projects and creating customized solutions for public and private institutions and organizations. Our research areas are: Simulation, optimization and modelling; Big Data, Data analysis and management; Smart cities; Mobile apps and GIS, Collaborative internet; ICT enhanced learning environments; Cybersecurity and ICT infrastructures.

**ORGANIZATION TYPE** University

**ORGANIZATION SIZE** 250+

**LINKEDIN** <https://www.linkedin.com/in/rosamariamartin/en>

**TWITTER** <http://RosaMariaMartin>

**AREAS OF ACTIVITIES** SOFTWARE/INTERNET

1. Application development
2. Content management
3. Data analysis
4. Mobile security systems
5. Mobile social networking

SERVICES/OTHERS

1. Education and training

## Offer

### SMART CITIES

Modelling and simulation of energy efficiency in buildings and transport, smart mobility (public transport systems, traffic management, dynamic guide applications and services, traffic and mobility data processing).

- New generation forecasting models for high-quality traffic and travel information, short-term real-time predictions
- Traffic data analytics: data filtering, completion and fusion, big data, interoperability
- Future travelling: Real-time multimodal journey planner, dynamic ridesharing
- Macro, meso and micro traffic simulation

**KEYWORDS:** **TRANSPORT** **TRAFFIC** **SIMULATION** **ROUTING**

**COOPERATION OFFERED**

1. Technical co-operation
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## Offer

### SMART LEARNING TECHNOLOGIES

ICT enhanced learning environments and technologies

KEYWORDS: **LEARNING ANALYTICS** **ADAPTIVE LEARNING** **MOBILE LEARNING**

#### COOPERATION OFFERED

1. Technical co-operation

#### COOPERATION REQUESTED

1. Technical co-operation
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## Offer

### H2020 COOPERATION RESEARCH

Cooperation in our areas of expertise

KEYWORDS: **H2020** **RESEARCH** **ICT**

#### COOPERATION OFFERED

1. Technical co-operation

#### COOPERATION REQUESTED

1. Technical co-operation
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## Offer

### BUSINESS INTELLIGENCE 2.0 - BIG DATA

In short, we master data management both from traditional setting such as data warehousing and new ones (Big Data-oriented) based on NoSQL.

Up to date, data warehousing has been the most popular architectural setting for decisional systems and its nowadays a mature and reliable technology stack present in many big companies/organizations and already making its way on SMEs. However, we are currently witnessing a second paradigm shift due to the success of data warehousing: the need to incorporate external data to the data warehouse. In short, many works have discussed the relevance of the context in nowadays decision making that cannot be focused on stationary data

and must deal with situational data as first-class citizen. The new paradigm shift has given rise to the so called Business Intelligence 2.0 and is inevitably coupled with the concept of Big Data. Although Big Data has been around for a while and has modified the agenda of many research communities, its definition is still far from being agreed and it usually refers to decisional systems characterized by the 3V's: volume (large data sets), variety (heterogeneous sources) and velocity (referring to processing and response time). Relational databases have been shown not to be the best choice for tackling these challenges and a new wave of non-relational databases (NoSQL) have emerged. These new systems are mainly built on the Cloud and they basically are distributed systems thought to exploit parallelism and the force of the Cloud to achieve better performance. They also follow alternative data models (key-value, document-stores, graph-databases, etc.) to reduce the impedance mismatch.

**KEYWORDS:** **BUSINESS INTELLIGENCE** **BIG DATA**

#### **COOPERATION OFFERED**

1. Technical co-operation
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## **Offer**

### **CYBERSECURITY-SERVICES AND RESEARCH OPPORTUNITIES**

Mobile applications security

#### **COOPERATION OFFERED**

1. Technical co-operation
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