

Invited Talk

Oscar Romero, Universitat Politècnica de Catalunya, Barcelona

Monday, 26.11.2018, 14:50 – 16:20, APB 3105

"Big Data Variety: On-Demand Data Integration"

Abstract. As big data systems get more complex, the data variety challenge has become the driving factor in current big data projects. From a technical perspective, data variety mainly boils down to data integration, which, unfortunately, is far away from being a resolved problem. Current efforts highlight the need to broaden the perspective beyond the data community and use semantic-aware formalisms, such as knowledge graphs, to tackle this problem. In this talk, we will revise the current state-of-the-art of the data variety challenge and present recent solutions to manage the problem.

Bio. I'm currently a tenure-track 2 lecturer at the Departament d'Enginyeria de Serveis i Sistemes d'Informació (ESSI), which belongs to the Universitat Politècnica de Catalunya (UPC-BarcelonaTech). I also coordinate the IT4BI Erasmus Mundus Master at UPC and the Big Data Management and Analytics postgraduate course at UPC School. Although my hometown is Lleida, I have already lived for more than 10 years in Barcelona. On March 2004 I obtained my bachelor's degree in Informatics Engineering at Facultat d'Informàtica de Barcelona (FIB). Later, on February 2010 I obtained my doctoral degree in Computing. My PhD thesis, directed by Dr. Alberto Abelló and entitled "Automating the Multidimensional Design of Data Warehouses", can be found [here](#). My main topics of interest are business intelligence, Big Data and the semantic web. My PhD thesis focused on data warehousing but since then, I have been working on many other topics such as NOSQL (and any technology beyond relational databases), bridging Big Data management and analytics, open data platforms (mostly at the database level), recommendation systems and semantic-aware systems (based on or exploiting semantic formalisms such as ontology languages or RDF). I am also interested in agile methodologies / formalisms to incorporate non-technical people in the design, maintenance and evolution of database systems.