

## “Educating data scientists: SoBigData Master”

*Friday, 22 May 2015 11:00 (20 minutes)*

One of the most pressing and fascinating challenges scientists face today, is understanding the complexity of our globally interconnected society. The big data arising from the digital breadcrumbs of human activities promise to let us scrutinize the ground truth of individual and collective behaviour at an unprecedented detail and scale. This increasing wealth of data is a chance to disentangle social complexity and face the challenges of our world, provided we can rely on social data mining, i.e., adequate means for accessing big data and extracting useful knowledge from them. The main obstacle to this accomplishment is the scarcity of data scientists. This talk will present the choice of SoBigData master at University of Pisa to address the challenge of educating data scientists, that on one hand need to encompass several facets and attitudes: technology, analysis, narrative, and ethics and on the other hand, need to blend rigor and creativity. On the first level, the skill of a SoBigData data scientist is at the intersection of: i) solid technical competences in the acquisition, integration and management of big data from multiple heterogeneous noisy sources; ii) deep data analysis and data modeling and mining capacities, well beyond traditional statistical tools; iii) ability to narrate the stories that data tell after analysis and modeling, using both visual and multi-media storytelling, up to data journalism; iv) strong preparation towards the various ethical and legal issues connected to big data analytics and the management of data pertaining to people, such as privacy and data protection, transparency and awareness, discrimination and fair use, etc.

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**Session Classification:** Distributed platforms for e-Learning: How can educators and scholars benefit from the Open Science Commons?