



Towards a European Laboratory on Big Data Analytics and Social Mining: bootstrap workshop

Pisa 18 July 2013, h 10:00-17:30 www.sobigdata.eu

Auditorium of the National Research Council,

Area della Ricerca CNR, Via Moruzzi, 1, Pisa

The big data originating from the digital breadcrumbs of human activities, sensed as a by-product of the ICT systems that we use everyday, record the multiple dimensions of social life. We need to set the ground for a science and technology of *social mining* – the process to transform the big data into high level social knowledge – which offers us unprecedented opportunities for understanding and managing the complexity of the global interconnected society we inhabit today. Three pillars support this vision:

- *Social sensing*, aimed at better methods for harvesting the big data from the techno-social ecosystem.
- *Social mining*, aimed at discovering patterns and models of human behavior across the various social dimensions.
- *Trust-based, privacy-aware digital ecosystem*, aimed at creating a new deal around the questions of privacy and data ownership, empowering everyone with control and transparency on own personal data and knowledge.

Social mining has the potential to provide a privacy-respectful social microscope, or *socioscope*, needed to observe the hidden mechanisms of socio-economic complexity. Around these scientific challenges a critical mass of multi-disciplinary scientists is teaming up, based on their pioneering work on the various facets of social mining, as well as big data and tools and systems and networks of international and interdisciplinary collaborators – academia, research and industry. There is a fertile ground for further aggregation of researchers and stakeholders, towards the creation of a European Laboratory on Big Data Analytics and Social Mining, capable of boosting research and innovation in the deployment of big data analytics, social mining and privacy/trust technologies to face global challenges.

We invite you to be part of this one-day workshop, entirely devoted to discuss the opportunity of big data analytics and social mining from different perspectives, including that of policy makers, public administration, European commission, industry, official statistics, and research. The agenda of the workshop includes presentations from leading scientists in big data analytics and social mining, short presentations of case studies and early experiences, and panel discussions across the different stakeholders.

Scientific Organizing Committee

- *Fosca Giannotti*, Knowledge Discovery and Data Mining Lab KDD LAB, ISTI-CNR, Pisa
- *Raffaele Perego*, High-Performance Computing Lab HPCLAB, ISTI-CNR, Pisa
- *Fabrizio Sebastiani*, Networked Multimedia Information Systems Lab NeMIS LAB, ISTI-CNR, Pisa
- *Andrea Passarella*, Ubiquitous Internet Lab, IIT-CNR, Pisa
- *Maurizio Tesconi*, Web Applications for the Future Internet WAFI LAB, IIT-CNR, Pisa
- *Dino Pedreschi*, Knowledge Discovery and Data Mining Lab KDD LAB, Dip. Informatica, Univ. Pisa
- *Paolo Ferragina*, Advanced Algorithms and Applications ACube Lab, Dip. Informatica, Univ. Pisa
- *Monica Pratesi*, Dip. Economia e Management, Univ. Pisa
- *Guido Caldarelli*, NETWORKS Lab, IMT Lucca
- *Fabrizio Lillo*, Quantitative Finance, Scuola Normale Superiore, Pisa
- *Roberto Barontini*, Management of Innovation, Scuola Superiore S. Anna, Pisa
- *Paolo Raviolo*, Univ. Siena
- *Filomena Maggino*, Dip. Informatica e Statistica, Univ. Firenze

Promoting Institutions

- Istituto di Scienza e Tecnologie dell'Informazione "A. Faedo", ISTI-CNR, Pisa. Director: *Claudio Montani*
- Dipartimento di Informatica, Univ. Pisa. Director: *Franco Turini*
- Istituto di Informatica e Telematica, IIT-CNR, Pisa. Director: *Domenico Laforenza*
- Regione Toscana. Direzione Generale Presidenza, Ufficio di collegamento con l'Unione Europea, Ricerca ed Innovazione. Policy Officer: *Livio Stefanelli*
- Dipartimento CNR di Ingegneria, ICT e Tecnologie per l'Energia e i Trasporti. Director: *Marco Conti*

Participation to the workshop is free but registration is required for logistic purposes.

Please register on line at: www.sobigdata.eu/registration.

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Program

10:00: Reception and refreshments

10:15-11:30: **Setting the stage**

Welcome address. Domenico LAFORENZA President CNR Research Campus, CNR and Nicoletta DE FRANCESCO, Vice-Rector, Università di Pisa,

Opening remarks. Claudio MONTANI (ISTI-CNR, Director), Franco TURINI (Dip. Informatica Univ. Pisa, Director).

Marco CONTI (DIITET-CNR, Director), *Towards a Euro Lab on Big Data & Social Mining*
Fosca GIANNOTTI (ISTI-CNR). *Big Data Analytics & Social Mining for Science and Society*
Dino PEDRESCHI (Univ. Pisa). *Democratizing big data: the ethical challenges of social mining*

11:30-12:00: **Keynote**

Big data big insights: the coming age of computational social science

David LAZER, Professor of Political Science and Computer and Information Science, Northeastern Univ., Boston, MA. Director, Program on Networked Governance, Harvard Univ.

12:00-13:30: **Panel 1** – *Big data & social mining: new models for participation and policy making.*

Stella TARGETTI (Vice Presidente Regione Toscana), Franco ACCORDINO (European Commission), Emanuele BALDACCI (ISTAT), Cosimo COMELLA (Garante Privacy), Flavia MARZANO (Stati Generali Innovazione). Moderator: Luca DE BIASE (Il Sole 24 Ore)

13:30-14:30: **Lunch**

14:30-16:00: **SoBigData pills.**

- *Monitoring trend and engagement with social media mining* Maurizio TESCONI (IIT-CNR)
- *Exploring the structure of society* – Andrea PASSARELLA (IIT-CNR)
- *Sentiment quantification and opinion surveys* – Fabrizio SEBASTIANI (ISTI-CNR)
- *Good answers for difficult questions* – Raffaele PEREGO (ISTI-CNR)
- *Understanding human mobility*, – Chiara RENSO (ISTI-CNR and Univ. Pisa)
- *Big data in finance and economics* – Fabrizio LILLO (Scuola Normale Superiore), Guido CALDARELLI (IMT Lucca)
- *Big data and official statistics – monitoring poverty/well-being at any scale* – Monica PRATESI (Univ. Pisa), Filomena MAGGINO (Univ. Firenze)
- *Do we need a big computer or a great algorithm?* – Paolo FERRAGINA (Univ. Pisa)

16:00-17:30: **Panel 2** – *Big data & social mining: new models for social innovation and business.*

- Renato SORU (Tiscali), Oscar CICCHETTI (Telecom Italia), Tina MARTINO (Octotelematics), Gianluigi GIGLIUCCI (ENEL Ricerca), Andrea DI BENEDETTI (CNA).
Moderator: Luca DE BIASE (Il Sole 24 Ore)

17:30 : **Conclusion & Refreshments**