First Call for SoBigData-funded Transnational Access

The SoBigData project invites researchers and professionals to apply to participate in Short Term Scientific Missions (STSMs) to carry forwards their own big data projects. These opportunities are offered as part of SoBigData's Transnational Access (TNA) activities and calls for for applications will be opened every six months.

You should submit your project application form to SoBigData by:
10 December 2016.

We welcome applications from individuals with a scientific interest, professionals, startups and innovators that may benefit from training in data science and social media analytics. The application form and accompanying instructions will be published here when the call opens on 15 October 2016.

Funding for a **short term scientific mission** (2 weeks to 2 months) are available up to 2500 euros per participant (to cover the cost of daily subsistence, accommodation, and European flights). STSM bursaries are awarded on a competitive basis, according to the procedure described in the application pack and eligibility criteria below, and based upon the quality of the applicant, the scientific merit of the proposed project, and their personal statement. Up to 10 bursaries are available from SoBigData in the first 2017 call.

Applications are invited for access at the following centres (infrastructures).
Please, note that the user group leader and the majority of the users must work in a country other than the country(ies) where the installation is located.
This rule does not apply:
  - if access is provided by an International organisation, the Joint Research Centre (JRC), an ERIC or similar legal entities;
  - in case of remote access to a set of installations located in different countries offering the same type of service.

- **Gate (Text and Social Media Mining), University of Sheffield**:
  - The Natural Language Processing (NLP) group at the University of Sheffield is one of the largest and most successful research groups in text and social media mining in the EU. We develop and maintain the world-

leading open-source GATE text and social media mining infrastructure (http://gate.ac.uk), its GATE Cloud deployment, and its vibrant user community.

- ◦ **Contact:** Kalina Bontcheva k.bontcheva@sheffield.ac.uk
- ◦ **Location**: Sheffield, United Kingdom

- **SoBigData.it, Pisa, Italy**:
  - ◦ The European laboratory on Big Data Analytics and Social Mining (www.SoBigData.it) is aimed at pursuing interdisciplinary research initiatives connected to the impetus that "big data" and the ICT's are having on science, and the socio-economic sciences. Participating groups in the call are: Knowledge Discovery and Data Mining Lab (KDD – ISTI), 'Networked Multimedia Information System' Lab. (NeMIS - ISTI), High Performance Computing Lab (HPC– ISTI), the Web Applications for the Future Internet (WAFI-IIT), Ubiquitous Internet groups (UI-IIT), and the Acube Lab (Acube-UNIPI), Quantitative Finance group at the Scuola Normale Superiore (SNS), IMT School for Advanced Studies Lucca (NETWORKS Unit)
  - ◦ **Contact**: Claudio Lucchese claudio.lucchese@isti.cnr.it
  - ◦ **Location**: Pisa, Italy

- **Fraunhofer IGD**:
  - ◦ The Competence Center for Information Visualization and Visual Analytics (IVA) at Fraunhofer IGD is a world-leading research centre for the interactive visualization of big data. We offer access to visual analytics and information visualization technologies and methods for multidimensional data, visual text analysis, and we offer advice in visualization, and interaction design.
  - ◦ **Contact**: Thorsten May; thorsten.may@igd.fraunhofer.de
  - ◦ **Location:** Darmstadt, Germany

- **UT**:
  - ◦ UT brings in a curated and inter-linked dataset of Estonian e-government and e-health service descriptions, detailed statistics of usage of said services, and data related to societal and economic development in Estonia over the past decade. The dataset is complemented with relevant automated analysis methods.
  - ◦ **Contact**: Jaan Ubi jaan.ubi@ut.ee
  - ◦ **Location**: Tallin, Estonia

- **LUH: L3S Research Center / Leibniz University Hannover**:
  - ◦ L3S provides access to innovative and cutting-edge datasets, methods and technologies for Web Science. The Alexandria infrastructure is based on a number of unique datasets like the German and UK Web Archives which span around 20 years of Web history, ArchiveIT collections, etc.. Researches focus around Web Search (especially temporal and Entity-centric search), Web Information Management (including semantic technologies) and the Web of People (including Personalization and Social Web).
  - ◦ **Contact**: Thomas Risse risse@L3S.de
  - ◦ **Location**: Hannover, Germany

- **Aalto University**:
  - ◦ The Data Mining group in ICS focuses on developing novel methods to extract knowledge from data, designing algorithms to summarize large volumes of data efficiently and effectively, and exploring new ways of using the extracted information. The research conducted in the Sociophysics Laboratory in BECS focuses on: (i) living and other complex systems, their measurement, analysis, modeling, understanding and control, (ii) detection of communities and social dynamics, with a focus on the dynamics of scientific interactions and human behavior in social and information systems.
  - ◦ **Contact**: Michael Mathioudakis michael.mathioudakis@aalto.fi
  - ◦ **Location**: Aalto, Finland

- **ETHZ**:
  - ◦ The Computational Social Science group at ETH Zurich aims to integrate social research by bringing modeling and computer simulation of social processes and phenomena together with related empirical, experimental, and data-driven work, while combining the perspectives of different scientific disciplines (e.g. computer science, socio-physics, social and complexity science). Big Data analytics, data-driven socio-systems, social mining, real-time data mining, the creation of self-organizing systems, innovation and the analysis of how science works, are core subjects of interest.
  - ◦ **Contact**: Iza Moise izabela.moise@gess.ethz.ch
  - ◦ **Location**: Zurich, Switzerland

Horizon 2020
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The goal is to provide researchers and professionals with access to big data computing platforms, big social data resources, and cutting-edge computational methods. STSM visitors will be able to:

- Interact with the local experts
- Discuss research questions
- Run experiments on non-public big social datasets and algorithms
- Present results at workshops/seminars

The STSM visits will enable multi-disciplinary social mining experiments with the SoBigData Research Infrastructure assets: big data sets, analytical tools, services and skills.

Description of the TNA offered

The SoBigData RI manages vertical, thematic environments, called **exploratories**, on top of the SoBigData infrastructures, for performing cross-disciplinary social mining research. The Transnational Activities offered in this call will be for short-term scientific missions, between 2 weeks and 2 months.

Each STSM proposal needs to be aligned with one of the following **exploratories** and also specify which of the centres listed above they wish to access:

- **City of Citizens:**
  - **Participating Partners**: SoBigData.it, Aalto University
  - **Brief description**: The exploratory is concerned with investigating city mobility. Our data scientists already study the traffic in the Italian cities of Pisa and Florence by analyzing Big Data sources such as mobile phone traces, veicular gps and social media data as proxy of human behaviour. New STSM proposals on complementary topics are welcome.

- **Well-being and Economy:**
  - **Participating Partners:** UT, SoBigData.it
  - **Brief description:** This exploratory uses data of purchases in supermarkets and investigates the changes in people's behavior after the economic crisis. This study allows to work out an early indicator of diseases. We also study the measurement of the real cost of life by studying the price variation. Furthermore we try to correlate people's well being with their social and mobility data. We also focus on systemic risk and credit risk measures and modeling using a complex network approach. Furthermore, we work on the topic of network reconstruction from partial information, focusing on social, economic and financial systems. New STSM proposals on complementary topics and/or methods are welcome.

- **Societal Debates**:
  - ◦ **Participating Partners**: Gate, LUH, Fraunhofer IGD, Aalto University, SoBigData.it
  - ◦ **Brief description**: By analysing discussions on social media and newspaper articles, this exploratory studies public debates to understand which are the most discussed topics, key opinions and stances expressed, and the characteristics of the various debate participants. By automatically analyzing and understanding text documents, we identify themes, follow the discussions around them, and track them through time and space.
- **Migration Studies**:
  - ◦ **Participating Partners**: SoBigData.it, GATE, ETHZ
  - ◦ **Brief description**: This exploratory will try to answer key questions around migration within Europe and worldwide, with particular focus on economic models of migration. Social media is being used as a key information source.

Pre-requisites:
1. Good understanding of social data and, ideally, track record of prior social data analysis projects
2. Experience with using at least one of machine learning, natural language processing, and/or complex networks algorithms

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