Call for Papers

Special Track on Social data and medical data analytics
http://midas.ctb.upm.es/sdma/

The growing availability and accessibility of key health-related data resources and the rapid proliferation of technological developments in data analytics is helping to extract the power of these datasets to improve diagnosis, shorten the time to market of drugs, help in early outbreak detection, improve education of healthcare professionals and reduce costs to name but a few.

Extracting the knowledge to make this a reality is still a daunting task: on the one hand, data sources are not integrated, they contain private information and are not structured. On the other hand, we still lack context- and privacy-aware algorithms to extract the knowledge after a proper curation and enrichment of the datasets.

Technology in recent years has made it possible not only to get data from the healthcare environment (hospitals, health centres, laboratories, etc.). It also allows information to be obtained from society itself (sensors, monitoring, Internet of Things (IoT) devices, social networks, etc.). In particular, social environments are a new source of data that allows information to be obtained at all community levels.

Health environments would benefit directly through the acquisition and the analysis of the information generated in any kind of social environment such as social networks, forums, chats, social sensors, Internet of Things (IoT) devices, surveillance systems, virtual worlds, to name but a few. These environments provides an incredible and rich amount of information that could be analysed and applied to the benefit of public health allowing the quality of life of the population to be improved as well as reducing economic costs. Policymakers, researchers, health professionals and managers are still attempting, with no great success, to acquire health information upon which to base their decisions.

The topics to be covered include the design, development, evaluation or validation of computer-based medical systems or methods within the following (but not limited to) areas:

- Challenges in social data analytics:
    - i) data management
    - ii) data curation
    - iii) opinion mining and sentiment analysis
    - iv) privacy-aware data mining algorithms
    - v) data quality and veracity
    - vi) natural language processing and text-mining
    - vii) semantics
    - viii) trend discovery and analysis
    - ix) graph mining and community detection
    - x) social sensors
    - xi) IoT devices
- Applications in social data analytics:
    - i) epidemiological analysis
    - ii) outbreak detection
    - iii) human behaviour
    - iv) medical skills and education
    - v) personalized medicine
    - vi) diagnosis, prognosis and prognostics

Submission instructions

Each contribution must be prepared following the two-column format and should not exceed the length of 6 (six) Letter-sized pages; the authors may use LaTeX or Microsoft Word templates when preparing their drafts. Papers must be formatted according to the information for IEEE authors. Papers must be submitted in PDF (Adobe's Portable Document Format) format and will not be accepted in any other format. Authors' kit can be found at: http://cbms2017.org/content/call-for-papers

Submissions should be made by sending an email to the main organizer. Please see specific instructions at: http://midas.ctb.upm.es/sdma/

Important dates

- Paper Submission deadline: January 30, 2017
- Notification of paper acceptance: March 20, 2017
- Camera-ready of accepted papers: April 13, 2017

Special track organizers

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