

Special Session on

Machine Learning and Text Analytics

in the 7th Multi-Disciplinary International Workshop on Artificial Intelligence (**MIWAI 2013**),

Dec. 09 -11, 2013 at Krabi, Thailand

Website: <http://khamreang.msu.ac.th/miwai13/index.php>

Session Chairs

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About

It's no secret that the world has seen an explosion of information in the recent past, an explosion that experts predict will continue as the billions of people who use online resources continue to expand their usage, and the Internet penetration increases. Further, the new transformed participative Web is allowing users to become co-creators of the content, rather than merely being consumers. Text constitutes the largest part of the Web content. While text documents and the traditional science of Information Retrieval have existed for a long time, the storage of text in electronic form and the resultant ease of dissemination and sharing over the Internet have changed the scenario. We are now witness to large volume of text stored in electronic forms and also new ways of exploiting them for obtaining useful information and inferences. Text analytics in its simplest form may be understood as a set of methods for extracting usable knowledge from unstructured text data. Text analytics describes a set of linguistic, statistical, and machine learning techniques that model, structure and process the information content of textual sources for business intelligence, exploratory data analysis, research, or investigation. The essence of text analytics is thus to take very large unstructured text documents and extract useful intelligence.

Text documents are structured for reading by people, but they are unstructured as far as data extraction or reading by a machine is concerned. The machine learning algorithms and techniques try to overcome this problem by allowing discovering useful knowledge from enormous collections of documents. Traditional data mining technologies mine knowledge from data structured with well-formed schemes such as relational tables. However, text data does not use such schemes, and the information is described freely within the documents. Therefore, a sophisticated set of algorithms and techniques, which draw building blocks from machine learning, language processing and statistical methods, are required. Machine learning, typically known as a branch of artificial intelligence, is primarily about the construction and study of systems that can learn from data. Text documents being 'the data' of today, we need to (a) explore the applicability of machine learning algorithms and techniques; (b) critically evaluate them; and (c) design new algorithmic formulations and systems; for obtaining useful inferences from the textual data. The special session on 'Machine Learning and Text Analytics' aims to bring together researchers and professionals working in the area to address this goal, look at the problems and issues, and to contribute to the state of the art.

Papers are invited on all topics related to machine learning (including the statistical and logical learning paradigms) and text processing algorithms and techniques; as applied to text analytics. **All accepted papers will be published in Springer LNAI series as part of the MIWAI 2013 proceedings.** Volumes published as part of the Lecture Notes in Computer Science (LNCS) series, incl. its subseries Lecture Notes in Artificial Intelligence (LNAI) are indexed by all major Indices (the full list is at: <http://www.springer.com/computer/lncs?SGWID=0-164-6-1068921-0>).

An indicative list of topics is given below:

Analytic environments,
Bayesian inference,
Classification,
Clustering,
Collaborative filtering,
Computational advertising,
Content analysis,
Content-based filtering,
Contextual awareness,
Co-reference resolution,
Disambiguation,
Document representation,
Evaluation (e.g., test collections, effectiveness measures, experimental design),
Graph representation of texts,
Graphical models,
Inductive logic programming,
Information extraction,
Kernel methods,
Learning systems
Linguistic analysis,

Named entity recognition,
Part of speech tagging,
Personalised, collaborative or user-adaptive IR,
Probabilistic computing,
Question answering systems,
Quantitative text analysis,
Recommender systems,
Relation extraction,
Scalability issues,
Sentiment analysis,
Social media analytics,
Statistical and relational learning,
Statistical methods,
Summarization,
Supervised learning,
Syntactic parsing,
Topic detection and tracking,
Topic models,
Unsupervised learning,
Web analytics, and
Web mining.

Important Dates

Deadline for paper submission:	July 31, 2013 (Hard deadline – No extensions)
Notification of acceptance:	September 1, 2013
Camera-ready manuscript submission:	September 15, 2013
Conference:	December 09 -11, 2013

Instructions for Authors

All submitted papers should be formatted according to the Springer's Lecture Notes in Artificial Intelligence instructions. (LaTeX and Word templates at: <http://www.springer.com/computer/lncs?SGWID=0-164-6-793341-0>)



The length of a paper should not exceed 12 pages. Please refer to the call for papers page at <http://khamreang.msu.ac.th/miwai13/index.php?url=cfp> for more details.

Please submit your paper via EasyChair Conference System

<https://www.easychair.org/conferences/?conf=miwai2013>

If you do not have EasyChair login, you will be first asked to register for an EasyChair account on this submission page. While submitting the paper, please specify that the paper is for the special session on **Machine Learning and Text Analytics** and submit the paper in PDF format by **July 31, 2013**.

For further information please contact **Dr Vivek Singh** at vivekks12@gmail.com (preferably with MIWAI 2013 in the subject line).