

IWBT'2007

Intelligent Web Based Tools

Proceedings

of the

International Workshop on Intelligent Web Based Tools

Foreword

Intelligent Web Based Tools designates a set of techniques in Artificial Intelligence (AI) (e.g., knowledge representation, planning, knowledge discovery and data mining, intelligent agents, social network intelligence) that have and will be employed in current and future generations of web-empowered products, systems, services, and activities. The workshop on "Intelligent Web Based Tools" brings together researchers and practitioners in the fields of web-commerce, web technologies, data mining and web mining tools to foster the exchange of ideas on knowledge representation, web information management, web data cleaning and pre-processing, and ubiquitous computing to build effective and intelligent web-based tools. In this workshop, we want to discuss new intelligent web-based tools and algorithms developed to improve user experience in the Web. Today, there are an important number of experts from different communities and backgrounds working on parallel approaches for a similar goal. This workshop is intended to be a straightforward way to establish fluent communication between these communities.

Topics of interest for the workshop as far as application domains are concerned include (but not limited to) the following:

- Web data cleaning and pre-processing tools (Web noise representation, tools for cleaning web data, information representation, pre-processing algorithms)
- Web information management (data models for the Web, multidimensional Web database and OLAP, Multimedia information Management, metadata for the Web)
- Knowledge extraction and representation for the Web (network communities, knowledge representation for the Web, Knowledge base, Semantic web).
- Business intelligence for electronic markets (Web marketing, web publishing, electronic commerce and electronic business).
- Ubiquitous computing and social intelligence (computational societies and markets, ubiquitous learning, web-based tools for collaborative work).
- Web mining (pattern extraction from web data, user behavior analysis, web content mining, web hyperlink analysis, web log mining.

We would like to express our appreciation to all authors of submitted papers, to the members of the program committee and all the people that have worked for this event.

Dr. Juan D. Velásquez Assistant Professor Web Intelligent Research Group http://wi.dii.uchile.cl/ jvelasqu@dii.uchile.cl Department of Industrial Engineering University of Chile

Program Committee

- Ajith Abraham, Chung-Ang University, South Korea.
- Hiroki Arimura, Hokkaido University, Japan.
- Bruno Apolloni, University of Milano, Italy.
- Frans Coenen, Liverpool University, UK.
- Jose Cordeiro, E.S.T. Setubal, Portugal.
- Joaquim Filipe, E.S.T. Setubal, Portugal.
- Hisao Ishibuchi, Osaka Prefecture University, Japan.
- Noriaki Kawamae, NTT Labs, Japan.
- In-Young Ko, Information and Communication University, South Korea.
- Daniel Neagu, Bradford University, UK.
- Vasile Palade, Oxford University, UK.
- Kazumi Saito, NTT Labs, Japan.
- Juan D. Velásquez, University of Chile, Chile.

Contents

	Pages
A Template-Based Mechanism for Dynamic Service Composition Based on Context Prediction in Ubicomp Applications. Angel Jiménez Molina, Hyung-Min Koo, In-Young Ko	1
Using Semantic Web Services to Integrate Data and Processes from Different Web Portals M. T. de Mello, M. Abel, Francisco García-Sánchez	9
Towards the Identification of ImportantWords from the Web User Point of View J. D. Velasquez and J. I. Fernandez	17
Meta-Search Utilizing Evolutionary Recommendation: A Web Search Architecture	27
An Evolutionary Multiagent System for Studying the Usability of Websites E. Mosqueira-Rey, D. Alonso-Ríos, A. Vázquez-García, B. Baldonedo del Río, A. Alonso-Betanzos, V. Moret-Bonillo	34
Visual Representation of Web Service Composition Problems through VLEPpO O. Hatzi, D. Vrakas, N. Bassiliades, D. Anagnostopoulos, I. Vlahavas	42