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— WI 2010 ——

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Welcome Message from the WI 2010 Conference Chair and Program Chair

We are pleased to give you a warm welcome to the 2010 IEEE/WIC/ACM International Conference on Web Intelligence and Intelligent Agent Technology (WI 2010 and IAT 2010). On behalf of the WI 2010 and IAT 2010 Conference Committees, we would like to thank you for your participation and we do hope that you will enjoy the conference technical and social programs as well as our beautiful and lovely city, Toronto.

The WI 2010 and IAT 2010 conferences are sponsored and co-organized by the IEEE Computer Society Technical Committee on Intelligent Informatics (TCII), Web Intelligence Consortium, ACM SIGART, Information Retrieval and Knowledge Management Research Lab, School of Information Technology, and York University, Toronto, Canada. These conferences provide leading international collaborations for researchers and practitioners to present state-of-the-art research techniques and results. They will enable participants to cross-fertilize ideas among various domains through idea sharing and discussions on the underlying principles of various paradigms.

Web intelligence (WI) has been recognized as a valuable new direction for scientific research and development in the exploration of the fundamental roles as well as the practical impact of artificial intelligence (AI) (e.g., knowledge representation, knowledge discovery and data mining, social network intelligence) and advanced information technologies (IT) (e.g., wireless networks, ubiquitous devices, social networks, semantic Web, wisdom Web, and data/knowledge grids) on the next generation of Web-empowered products, systems, services and activities. It is one of the most the important as well as most promising IT research fields in the era of Web and agent intelligence.

The 2010 IEEE/WIC/ACM International Conference on Web Intelligence (WI 2010) was held jointly with the 2010 IEEE/WIC/ACM International Conference on Intelligent Agent Technology (IAT 2010). The main topics considered at IEEE/WIC/ACM WI 2010 are as follows:

WI Foundations

- Brain Informatics for WI
- Human-Level WI
- New Cognitively Inspired Models for WI
- Granular Computing (GrC) for WI
- Autonomy-Oriented Computing (AOC) for WI
- Neuroeconomics for WI

World Wide Wisdom Web (W4)

- Meta-Knowledge Discovery and Representation
- Problem Solver Markup Language (PSML)

- Web Crawling Systems
- Search Engines and Meta-search Engines

Intelligent Human/Web Interaction

- Adaptive Web Interfaces
- Context-Aware Computing
- Learning User Profiles
- Personalized Interfaces
- Personalized Web Sites
- Remembrance Agents
- Multimedia Representation
- Visualization of Information and Knowledge
- Social and Psychological Issues

Web Support Systems

- Information Retrieval Support Systems
- Web Site Navigation Support Systems
- Recommender Support Systems
- Web-Based Decision Support Systems
- Soft Computing (including neural networks, fuzzy logic, evolutionary computation, rough sets, and granular computing) and Uncertainty Management for WI

Intelligent e-Technology

- Business Intelligence
- Intelligent Enterprise Portals
- Web-Based Direct Marketing and CRM
- Web-Based EDI
- Digital Libraries
- e-Publishing
- e-Business and e-Commerce
- e-Things and e-Activities
- e-Finance
- e-Learning
- e-Medicine and e-Health
- e-Science
- e-Government
- e-Community
- Decentralized Community Communication Techniques
- Web Security, Integrity, Privacy and Trust

WI 2010 and IAT 2010 received 505 submissions (313 papers for WI 2010 and 192 for IAT 2010) to the research and industry tracks from 46 countries and regions around the world. For WI 2010, 51 papers were accepted as regular papers and 66 papers were accepted as short

papers. For IAT 2010, 37 papers were accepted as regular papers and 41 papers were accepted as short papers. As a result, approximately 16% of the WI 2010 submissions were accepted as regular papers and 21% were accepted as short papers. For IAT 2010, around 19% of the submissions were accepted as regular papers and 21% were accepted as short papers. All submitted papers were reviewed by at least three program committee members, and any cases of conflict were further reviewed and resolved by one program vice chair and one program co-chair. There were a few borderline papers, which were re-reviewed by at least one additional program committee member and the program co-chairs.

It is impossible to organize a high-quality conference without the enormous support and expertise of many top class researchers and leaders. Our sincere thanks are due to all chairs, cochairs, vice chairs, WIC advisory board members, WIC technical committee and WI/IAT steering committee members, program committee members, reviewers, the conference secretariat, the conference web support team, and the cyber-chair for their wonderful contributions. In particular, we would like to acknowledge the generous help received from Ning Zhong, Vivian Hu, Jessie Zhao, Jun Miao, Ellis Lau, Dawid Kasperowicz, and Heather Bai. Our special thanks go to Dr. Juzhen Dong for her continuous support.

We are grateful to the following distinguished guest speakers for the delivery of the keynote/invited addresses:

- Professor Alan Smeaton, Dublin City University, Ireland
- Professor Ian Witten, University of Waikato, New Zealand
- Professor Maria Gini, University of Minnesota, USA
- Professor Milind Tambe, University of Southern California, USA
- Professor Pasi Gabriella, Università degli Studi di Milano Bicocca, Italy

We wish to express our appreciation to the conference sponsors. We are grateful to the authors, presenters, and delegates for their contributions and participation. We wish to thank the staff at the IEEE Computer Society Press for their professional help and support in compiling the proceedings.

Xiangji Jimmy Huang *General Program Chair* Nick Cercone Conference Chair