ARTIFICIAL INTELLIGENCE APPLICATIONS AND INNOVATIONS

IFIP – The International Federation for Information Processing

IFIP was founded in 1960 under the auspices of UNESCO, following the First World Computer Congress held in Paris the previous year. An umbrella organization for societies working in information processing, IFIP's aim is two-fold: to support information processing within its member countries and to encourage technology transfer to developing nations. As its mission statement clearly states,

IFIP's mission is to be the leading, truly international, apolitical organization which encourages and assists in the development, exploitation and application of information technology for the benefit of all people.

IFIP is a non-profitmaking organization, run almost solely by 2500 volunteers. It operates through a number of technical committees, which organize events and publications. IFIP's events range from an international congress to local seminars, but the most important are:

- The IFIP World Computer Congress, held every second year;
- Open conferences;
- Working conferences.

The flagship event is the IFIP World Computer Congress, at which both invited and contributed papers are presented. Contributed papers are rigorously refereed and the rejection rate is high.

As with the Congress, participation in the open conferences is open to all and papers may be invited or submitted. Again, submitted papers are stringently refereed.

The working conferences are structured differently. They are usually run by a working group and attendance is small and by invitation only. Their purpose is to create an atmosphere conducive to innovation and development. Refereeing is less rigorous and papers are subjected to extensive group discussion.

Publications arising from IFIP events vary. The papers presented at the IFIP World Computer Congress and at open conferences are published as conference proceedings, while the results of the working conferences are often published as collections of selected and edited papers.

Any national society whose primary activity is in information may apply to become a full member of IFIP, although full membership is restricted to one society per country. Full members are entitled to vote at the annual General Assembly, National societies preferring a less committed involvement may apply for associate or corresponding membership. Associate members enjoy the same benefits as full members, but without voting rights. Corresponding members are not represented in IFIP bodies. Affiliated membership is open to non-national societies, and individual and honorary membership schemes are also offered.

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Foreword

The papers in this volume comprise the refereed proceedings of the Second International Conference on Artificial Intelligence Applications and Innovations (AIAI2005), in Beijing, China in 2005.

The conference is sponsored by the IFIP Technical Committee on Artificial Intelligence (Technical Committee 12) and its Working Group 12.5 (Artificial Intelligence Applications), and organized by China Agricultural University and Information Committee, Chinese Society of Agricultural Engineering.

A very promising sign of the growing importance of Artificial Intelligence techniques in practical applications is the large number of submissions received this time - more than 150. All papers were reviewed by at least two members of the Programme Committee. The best 93 were selected for the conference and are included in this volume. The international nature of IFIP is amply reflected in the large number of countries represented here.

The conference also featured a Symposium on partner make-matching about Professional Practice in Artificial Intelligence in European Commission funded and bilateral cooperation projects, it is expected about 140 participants will attend the event.

I should like to thank the program co-chair Professor Zongzhi Shi, Secretary in General Mr. Baoji Wang, Vice Chair of the organization committee Dr. Renjie Dong for all their efforts in organizing the conference. Our special thanks should also go to Prof. Max Bramer and Prof. John Debenham for their kind help in the each step of the conference organization, and all the members of our program committee for reviewing an unexpectedly large number of papers to a tight deadline. I should also like to thank Ms. Xiangyun Guo and Mr. xviii

Wei Zhu for their assistance in editing this volume of proceedings.

This is the second in a new series of conferences dedicated to real-world applications of AI around the world. The wide range and importance of these applications is clearly indicated by the papers in this volume. Both are likely to increase still further as time goes by and we intend to reflect these developments in our future conferences.

Daoliang Li

专通意

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