The Proceedings of the International Computer Congress 2004 on



WAVELET ANALYSIS AND ITS APPLICATIONS, AND ACTIVE MEDIA TECHNOLOGY

Volume 2

Editor-in-Chief

Jian Ping Li

WAVELET ANALYSIS AND ITS APPLICATIONS, AND ACTIVE MEDIA TECHNOLOGY

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Editor-in-Chief

Jian Ping Li
Logistical Engineering University, P.R. China

Editors

John Daugman
Cambridge University, UK

Victor Wickerhauser Washington University, USA

Bruno Torresani

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The Pennsylvania State University, USA

Ning Zhong

Japan University of Science and Technology, Japan

Sankar K Pal

Indian Statistical Institute, India

Yuan Yan Tang

Hong Kong Baptist University, Hong Kong

Jiming Liu

Hong Kong Baptist University, Hong Kong



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Preface

Wavelet analysis is not only based on a "bright new idea", but also on concepts that already existed under various forms in many different fields. The formalization and emergence of this "wavelet theory" is the result of a multidisciplinary effort that brought together many kinds of scientists in the world. For signal processing, this connection has created a flow of ideas that goes well beyond the construction of new bases or transforms. Wavelet theory has been employed in many fields and applications. Active media technology is concerned with the development of autonomous computational or physical entities capable of perceiving, reasoning, adapting, learning, cooperating, and delegating in a dynamic environment.

In order to stimulate the future development, explore novel applications, and exchange ideas for developing robust solutions, the International Computer Congress 2004 on Wavelet Analysis and Its Applications and Active Media Technology was held at Logistical Engineering University in Chongqing in May 2004. We have received 280 full papers submitted from all over the world. To ensure the quality of the conference and proceedings, each paper was reviewed by different reviewers. After a thorough review process, the program committee selected 160 papers as regular papers and short papers. The proceedings was divided to volume 1 and volume 2 and published by World Scientific. This book is an attempt to capture the essence of the current state of the art in wavelet analysis and active media technology. There ware 6 invited talks delivered by distinguished researchers, namely Prof. John Daugman from Cambridge University, UK, Prof. Bruno Torresani from Inria, France, Prof. Victor Wickerhauser from Washington University, USA, Prof. Ning Zhong from Maebashi Institute of Technology, Japan, Prof. John Yen from The Pennsylvania State University, USA, and Prof. Sankar K. Pal from the Indian Statistical Institute, India.

We must add that the conference organizing committee, the conference program committee and the reviewers did an excellent job within a very tight schedule. We wish to thank all the authors for submitting their work to the conference and all the participants, whether you came as a presenter or an attendee. We hope that there was ample time for discussion and opportunity to make new acquaintances. Finally, we hope that you experienced an interesting and exciting conference and enjoyed your stay in Chongqing.

We hope that you will enjoy and benefit from the papers in this book.

Jian Ping Li, Professor, Ph.D.

Head of International Centre for Wavelet Analysis and Its applications
Logistical Engineering University, Chongqing 400016, P.R.China
Email: jpli2222@yahoo.com, jpli2222@sina.com
February 2004

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