

Lecture Notes in Artificial Intelligence 3849

Edited by J. G. Carbonell and J. Siekmann

Subseries of Lecture Notes in Computer Science

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Fuzzy Logic and Applications

6th International Workshop, WILF 2005
Crema, Italy, September 15-17, 2005
Revised Selected Papers



Springer

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Library of Congress Control Number: 2006920790

CR Subject Classification (1998): I.2.3, I.5, F.4.1, F.1, F.2, G.2, I.2, I.4

LNCS Sublibrary: SL 7 – Artificial Intelligence

ISSN	0302-9743
ISBN-10	3-540-32529-8 Springer Berlin Heidelberg New York
ISBN-13	978-3-540-32529-1 Springer Berlin Heidelberg New York

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© Springer-Verlag Berlin Heidelberg 2006
Printed in Germany

Typesetting: Camera-ready by author, data conversion by Scientific Publishing Services, Chennai, India
Printed on acid-free paper SPIN: 11676935 06/3142 5 4 3 2 1 0

Preface

This volume contains the proceedings of the 6th International Workshop on Soft Computing and Applications (WILF 2005), which took place in Crema, Italy, on September 15–17, 2005, continuing an established tradition of biannual meetings among researchers and developers from both academia and industry to report on the latest scientific and theoretical advances, to discuss and debate major issues, and to demonstrate state-of-the-art systems.

This edition of the workshop included two special sessions, sort of subworkshops, focusing on the application of soft computing techniques (or computational intelligence) to image processing (SCIP) and bioinformatics (CIBB).

WILF began life in Naples in 1995. Subsequent editions of this event took place in 1997 in Bari, in 1999 in Genoa, in 2001 in Milan, and in 2003 back in Naples.

Soft computing, also known as computational intelligence, differs from conventional (hard) computing in that, unlike hard computing, it is tolerant of imprecision, uncertainty, partial truth, and approximation. The guiding principle of soft computing is to exploit the tolerance for imprecision, uncertainty, partial truth, and approximation to achieve tractability, robustness, and low solution cost. The main components of soft computing are fuzzy logic, neural computing, and evolutionary computation.

A rigorous peer-review selection process was applied to the 86 submitted papers. The Program Committee was carefully selected for their knowledge and expertise, and, as far as possible, papers were matched with the reviewer's particular interests and special expertise. The results of this process are seen here in the high quality of papers published within this volume.

Of the 50 published papers, 23 have an Italian provenance; the next strongest representation is from Korea, with 9 papers; all remaining papers are European, with the exception of 3 from the USA, 1 from Algeria and 1 from Iran. This distribution confirms the vocation of WILF to establish itself as a truly international event.

The success of this conference is to be credited to the contribution of many people. In the first place, we would like to thank the members of the Program Committee for their commitment to the task of providing high-quality reviews. We would also like to thank the Information Technology Department of the University of Milan, which hosted the workshop on its premises.

December 2005

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