### **Preface**

Data analysis and engineering, and associated learning paradigms, are playing increasingly important roles in an increasing number of application fields. Developments and specialities will benefit many scientific and engineering domains from knowledge/information discovery, data mining and analysis, agents and Internet applications to financial management and bio-informatics.

Intelligent Data Engineering and Automated Learning (IDEAL) is a biennial conference dedicated to emerging and challenging topics in intelligent data analysis and engineering and associated learning paradigms. Following the highly successful IDEAL'98 and IDEAL'00 conferences, both held in Hong Kong, the third conference in this series, IDEAL'02, attracted researchers, scientists and practitioners from all over the world, who came together in Manchester to present their findings and theories, to exchange ideas, and to share their successes. IDEAL has proven to be an *ideal* forum for revealing and developing the latest theoretical advances and practical applications in intelligent data engineering and automated learning. It is becoming a major international and interdisciplinary event. The themes of IDEAL'02 are Document Analysis and Management, Data Mining, Financial Engineering, Agent Technologies, and Bio-informatics. Over 150 papers were submitted to the conference and they were reviewed by the Program Committee and the additional reviewers. We finally selected about 80 high-quality papers. A special session on Autonomous Mining also contributed a number of excellent papers.

We would like to thank the International Advisory Committee for their guidance and advice, and the Program Committee and additional reviewers for their efficient reviewing of the contributed papers and their helpful comments for the authors. The Asia and America Liaisons did also an excellent job in publicizing the event. We would also like to express our gratitude to the IEEE Neural Networks Society, the UK Engineering and Physical Sciences Research Council (EPSRC), the publisher, Springer-Verlag, and the Manchester Conference Centre for their support throughout.

University of Manchester Institute of Science and Technology (UMIST) Manchester, UK

June 2002

Hujun Yin Nigel M. Allinson Richard Freeman John Keane Simon Hubbard

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