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The 1997 International Conference on Digital Signal Processing (DSP97) is the 13th in a series of conferences organised in co-operation with IEEE Signal Processing Society, IEE and EURASIP and devoted to all theoretical and experimental aspects of digital signal and image processing. Such conferences are possible only because of the continuing interest and support of the members of the above organisations, expressed both by their submission of papers of high quality and by their attendance at the Conference. The DSP97 Organising Committee is grateful to all the authors, session chairs and session organisers for contributing to the success of the Conference.

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Preface

IT IS WITH GREAT PLEASURE THAT WE WELCOME YOU TO THE BEAUTIFUL ISLAND OF SANTORINI, FOR OUR DSP97 Conference. The DSP Conference has truly come a long way! It was 29 years ago, in 1968, when the first international meeting on Digital Signal Processing was organised in London. Since then, this successful event continued in London every two years and in Florence every three years. The last two meetings took place in Cyprus in 1993 and 1995. It is the first time that this prominent scientific conference is held in Hellas (Greece). It is important to note that the IEEE Signal Processing Society, IEE and EURASIP are supporting it and its proceedings are distributed by IEEE.

The successful scheme of the earlier events was followed again, namely we have a significant number of special sessions organised by internationally recognized experts in their areas. A total of 93 papers are presented in 11 special sessions cited below with the session organisers. The role of the session organisers was crucial in that they were responsible for the general theme of their sessions, for the invitation of the speakers and for assessing the quality of the contributions. This year the special sessions and the corresponding organisers are:

- Adaptive Filtering and Analysis (C.F.N. COWAN, *Queen's University of Belfast, UK*)
- Biomedical Signal and Image Processing (Y. ATTIKIOUZEL, *The University of Western Australia, Australia*)
- Blind Equalisation and Channel Estimation (M.K. TSATSANIS, *Stevens Institute of Technology, USA*)
- Higher Order Statistics (P.T. STATHAKI, *Imperial College, UK*)
- Multimedia Signal Processing (A.K. KATSAGGELOS, *Northwestern University, USA*)
- Neural Networks and Fuzzy Logic in Signal Processing (S.D. KOLLIAS, *National Technical University of Athens, Greece*)
- Nonlinear and Morphological Signal and Image Processing (A.N. VENETSANOPOULOS, *University of Toronto, Canada*)
- Orthogonal Transforms: Algorithms and Applications (A.N. SKODRAS, *University of Patras, Greece*)
- Signal Processing Techniques for Wireless Communications (C.B. PAPADIAS, *Stanford University, USA*)
- Stereoscopic and 3D Imaging (M.G. STRINTZIS, *Aristotle University of Thessaloniki, Greece*).
- Wavelets and Subband Signal Processing and Coding (N.J. FLIEGE, *University of Mannheim, Germany*)

These papers are published in Volume 1 of the Proceedings.

Apart from the special session submissions, DSP97 drew a large number (204) of submissions from all over the world (31 countries). These were sent to the reviewers who performed the demanding task of reviewing them in a very short time. We feel very much indebted to them for their help in retaining the high standard of DSP97. The reviewers selected 173 contributions as appropriate to the subject and these have been arranged in 26 lecture or poster sessions. These papers are published in Volume 2 of the Proceedings.

The technical program is highlighted by the three plenary lectures on:

- “Wavelet Based Signal Processing” by C.S. BURRUS
- “Signal Processing in Mobile Communication Systems” by M. BELLANGER, and
- “Blind Multivariable Equalization” by P. DUHAMEL.

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