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Preface

This volume contains the Proceedings of the *10th Italian Workshop on Neural Nets WIRN VIETRI-98*, jointly organized by the International Institute for Advanced Scientific Studies “Eduardo R. Caianiello” (IIASS), the Società Italiana Reti Neuroniche (SIREN), the IEEE NNC Italian RIG and the Italian SIG of the INSS.

This volume is dedicated to Marco Protasi, a leading scientist in the fields of Algorithmics, Computability, Discrete Mathematics and Neural Networks, who died on 1st February 1998. A biographical sketch of Professor Protasi by Stefano Fanelli is included.

Following the tradition of previous years, we invited two foreign scientists to the workshop, Professor P. Baldi and Professor D. Saad, who respectively presented the lectures “Software Foundation Libraries for Intelligent Systems” and “Theoretical Approaches to On-Line Learning in Smooth Multilayer Networks”. In addition, a review talk was presented, dealing with a very up-to-date topic: “Combining Neural Networks and Hidden Markov Models for Speech Recognition”.

A large part of the book contains original contributions approved by the referees as oral or poster presentations which have been assembled for reading convenience into 3 sections: Architectures and Algorithms, Mathematical Models, Pattern Recognition and Signal Processing.

The editors would like to thank the invited speakers, the review lecturer and all the contributors whose highly qualified papers helped with the success of the workshop.

Finally, special thanks go to the referees for their accurate work.

Maria Marinaro
Roberto Tagliaferri

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