Preface

The Swedish Artificial Intelligence Society (SAIS) and the Swedish Society for Learning Systems (SSLS) have a long history of activities, seminars and workshops in Sweden and Scandinavian. Sweden and Scandinavian has developed a strong and successful community producing high quality research of benefit for both research community and industry. Combining both application oriented research and foundational research works well in Scandinavia and both have the same status. The yearly workshop where the Artificial Intelligence and Learning Systems communities meet is an important tradition and probably one of the contributing factors to the success of the community.

Artificial Intelligence (AI) and Machine Learning (ML) have much in common and are also strengthening each others, as multidisciplinary research is increasingly common and fruitful. While ML traditionally focused more on areas with a large amount of available data (data rich and information pour), AI often tackled domains with little data (data pour and information rich). Many important applications that are today not yet fully solved seem not solvable at all with a single approach and both AI and ML have a tradition in hybrid approaches.

This special issue of the *Journal of Intelligent & Fuzzy Systems* presents a selection of papers from the successful SAIS & SSLS workshop held in Västers on 12 to 14 April 2005, organised by Peter Funk and with more than 80 participants. As program chairs acted Peter Funk, Thorsteinn Rognvaldsson and Ning Xiong. Further, we wish to thank the program committee for their effort and in producing high quality reviews, three reviewers were appointed to each paper. Their reviews have been the main source for the guest editors to make the final selections. This year's flavour for selection has been application oriented AI research. The application-oriented focus in the papers has lead to interesting theoretical questions and contributions reflecting the main strength of the Swedish industrial research climate. It could be argued that some of them would not have taken place if the application focus would have been less.

The Guest Editors
Peter Funk and Lambert Spaanenburg
Västers and Lund, November 2005