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Pattern Recognition with Support Vector Machines

First International Workshop, SVM 2002
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Preface

With their introduction in 1995, Support Vector Machines (SVMs) marked the beginning of a new era in the learning from examples paradigm. Rooted in the Statistical Learning Theory developed by Vladimir Vapnik at AT&T, SVMs quickly gained attention from the pattern recognition community due to a number of theoretical and computational merits. These include, for example, the simple geometrical interpretation of the margin, uniqueness of the solution, statistical robustness of the loss function, modularity of the kernel function, and overfit control through the choice of a single regularization parameter.

Like all really good and far reaching ideas, SVMs raised a number of interesting problems for both theoreticians and practitioners. New approaches to Statistical Learning Theory are under development and new and more efficient methods for computing SVM with a large number of examples are being studied. Being interested in the development of trainable systems ourselves, we decided to organize an international workshop as a satellite event of the 16th International Conference on Pattern Recognition emphasizing the practical impact and relevance of SVMs for pattern recognition.

By March 2002, a total of 57 full papers had been submitted from 21 countries. To ensure the high quality of workshop and proceedings, the program committee selected and accepted 30 of them after a thorough review process. Of these papers 16 were presented in 4 oral sessions and 14 in a poster session. The papers span a variety of topics in pattern recognition with SVMs from computational theories to their implementations. In addition to these excellent presentations, there were two invited papers by Sayan Mukherjee, MIT and Yoshua Bengio, University of Montreal.

SVM 2002 was organized by the Center for Artificial Vision Research at Korea University and by the Department of Computer and Information Science at the University of Genova. We wish to thank all the members of the Program Committee and the additional reviewers who managed to review the papers in a very short time. We are also grateful to Sang-Woong Lee for developing and maintaining the wonderful web-based paper submission/review system. Finally we thank our sponsors, the Center for Biological and Computational Learning at MIT, the Brain Science Research Center at KAIST, the Statistical Research Center for Complex Systems at Seoul National University, and WatchVision, Inc. for their support.

We hope that all presenters and attendees had an enjoyable SVM 2002. There will have been ample time for discussion inside and outside the workshop hall and plenty of opportunity to make new acquaintances. Last but not least, we would like to express our gratitude to all the contributors, reviewers, program committee members, and sponsors, without whom the workshop would not have been possible.

May 2002

Seong-Whan Lee
Alessandro Verri

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