

# Preface

The Fourth International Workshop on Learning Classifier Systems (IWLCS 2001) was held July 7-8, 2001, in San Francisco, California, during the Genetic and Evolutionary Computation Conference (GECCO 2001). We have included in this volume revised and extended versions of eleven of the papers presented at the workshop.

The volume is organized into two main parts. The first is dedicated to important theoretical issues of learning classifier systems research including the influence of exploration strategy, a model of self-adaptive classifier systems, and the use of classifier systems for social simulation. The second part contains papers discussing applications of learning classifier systems such as data mining, stock trading, and power distribution networks.

An appendix contains a paper presenting a formal description of ACS, a rapidly emerging learning classifier system model.

This book is the ideal continuation of the two volumes from the previous workshops, published by Springer-Verlag as LNAI 1813 and LNAI 1996. We hope it will be a useful support for researchers interested in learning classifier systems and will provide insights into the most relevant topics and the most interesting open issues.

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# Organization

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