

Table of Contents

I Basics

- What Is a Learning Classifier System? 3
*J.H. Holland, Lashon B. Booker, Marco Colombetti, Marco Dorigo,
David E. Goldberg, Stephanie Forrest, Rick L. Riolo, Robert E. Smith,
Pier Luca Lanzi, Wolfgang Stolzmann, Stewart W. Wilson*
- A Roadmap to the Last Decade of Learning Classifier System Research .. 33
Pier Luca Lanzi, Rick L. Riolo
- State of XCS Classifier System Research 63
Stewart W. Wilson
- An Introduction to Learning Fuzzy Classifier Systems 83
Andrea Bonarini

II Advanced Topics

- Fuzzy and Crisp Representations of Real-valued Input
for Learning Classifier Systems 107
Andrea Bonarini, Claudio Bonacina, Matteo Matteucci
- Do We Really Need to Estimate Rule Utilities in Classifier Systems? 125
Lashon B. Booker
- Strength or Accuracy? Fitness calculation in learning classifier systems ... 143
Tim Kovacs
- Non-homogeneous Classifier Systems in a Macro-evolution Process 161
Claude Lattaud
- An Introduction to Anticipatory Classifier Systems 175
Wolfgang Stolzmann
- A Corporate XCS 195
Andy Tomlinson, Larry Bull
- Get Real! XCS with Continuous-Valued Inputs 209
Stewart W. Wilson

III Applications

XCS and the Monk's Problems	223
<i>Shaun Saxon, Alwyn Barry</i>	
Learning Classifier Systems Applied to Knowledge Discovery in Clinical Research Databases	243
<i>John H. Holmes</i>	
An Adaptive Agent Based Economic Model	263
<i>Sonia Schulenburg, Peter Ross</i>	
The Fighter Aircraft LCS: A Case of Different LCS Goals and Techniques .	283
<i>R. E. Smith, B. A. Dike, B. Ravichandran, A. El-Fallah, R. K. Mehra</i>	
Latent Learning and Action Planning in Robots with Anticipatory Classifier Systems	301
<i>Wolfgang Stolzmann, Martin Butz</i>	

IV The Bibliography

A Learning Classifier Systems Bibliography	321
<i>Tim Kovacs, Pier Luca Lanzi</i>	
Author Index	349



<http://www.springer.com/978-3-540-67729-1>

Learning Classifier Systems

From Foundations to Applications

Lanzi, P.L.; Stolzmann, W.; Wilson, S.W. (Eds.)

2000, X, 354 p., Softcover

ISBN: 978-3-540-67729-1