

SpringerBriefs in Intelligent Systems

Artificial Intelligence, Multiagent Systems, and Cognitive Robotics

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Typical texts for publication in the series include (but are not limited to) state-of-the-art reviews, tutorials, summaries, introductions, surveys, and in-depth case and application studies of established or emerging fields and topics in the realm of computational intelligent systems.

Essays exploring philosophical and societal issues raised by intelligent systems are also very welcome.

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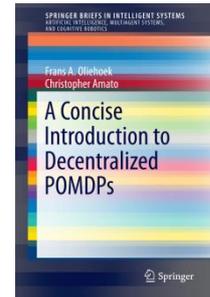
Published/Planned Titles

A Concise Introduction to Decentralized POMDPs

Frans A. Oliehoek, Christopher Amato

ISBN 978-3-319-28927-4

Introduces multiagent planning under uncertainty as formalized by decentralized partially observable Markov decision processes (Dec-POMDPs). Intended audience is researchers and graduate students working in the fields of artificial intelligence related to sequential decision making: reinforcement learning, decision-theoretic planning for single agents, classical multi-agent planning, decentralized control, and operations research.

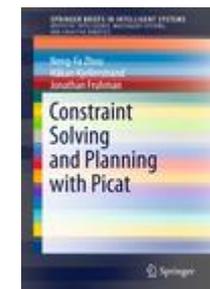


Constraint Solving and Planning with Picat

Neng-Fa Zhou, Håkan Kjellerstrand, Jonathan Fruhman

ISBN 978-3-319-25881-2

Introduces a new logic-based multiparadigm programming language that integrates logic programming, functional programming, dynamic programming with tabling, and scripting, for use in solving combinatorial search problems, including CP, SAT, and MIP-based solver modules.

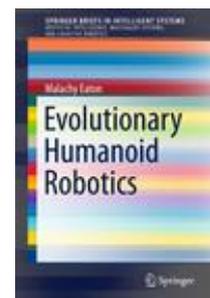


Evolutionary Humanoid Robotics

Malachy Eaton

ISBN 978-3-662-44598-3

Examines two distinct strands of research on autonomous robots – evolutionary robotics and humanoid robot research – and how these are converging in the novel field of evolutionary humanoid robotics.



Belief Change: Introduction and Overview

Eduardo Fermé, Sven Ove Hansson

The logic of theory change, introduced in 1985, was the starting-point of a large and rapidly growing literature that employs formal models in the investigation of changes in belief states and databases. This book summarizes the developments. The topics covered include equivalent characterizations of AGM operations, extended representations of the belief states, change operators not included in the original framework, iterated change, applications of the model, its connections with other formal frameworks, and criticism of the model.

Introduction to Learning Classifier Systems

Ryan Urbanowicz, Will N. Browne

Accessible introduction to LCSs for undergraduate and postgraduate students, data analysts, and machine learning practitioners.

Practical Modelling of Dynamic Decision Making

Rick Evertsz

Presents TDF (Tactics Development Framework), a practical methodology for eliciting and engineering models of expert decision-making in dynamic domains.

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