

Proceedings in Adaptation, Learning and Optimization

Volume 8

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About this Series

The role of adaptation, learning and optimization are becoming increasingly essential and intertwined. The capability of a system to adapt either through modification of its physiological structure or via some revalidation process of internal mechanisms that directly dictate the response or behavior is crucial in many real world applications. Optimization lies at the heart of most machine learning approaches while learning and optimization are two primary means to effect adaptation in various forms. They usually involve computational processes incorporated within the system that trigger parametric updating and knowledge or model enhancement, giving rise to progressive improvement. This book series serves as a channel to consolidate work related to topics linked to adaptation, learning and optimization in systems and structures. Topics covered under this series include:

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- aspects of adaptation in robotics
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- systemic alliance of stochastic and conventional search techniques
- all aspects of adaptations in man-machine systems.

This book series bridges the dichotomy of modern and conventional mathematical and heuristic/meta-heuristics approaches to bring about effective adaptation, learning and optimization. It propels the maxim that the old and the new can come together and be combined synergistically to scale new heights in problem-solving. To reach such a level, numerous research issues will emerge and researchers will find the book series a convenient medium to track the progresses made.

More information about this series at <http://www.springer.com/series/13543>

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Intelligent and Evolutionary Systems

The 20th Asia Pacific Symposium, IES 2016,
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Proceedings

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Preface

This PALO volume constitutes the proceedings of the 20th Asia Pacific Symposium on Intelligent and Evolutionary Systems (IES 2016). The symposium first took place in 1997 in Canberra, and since then, the series has become a prestigious incubator of research ideas, as well as facilitator of research collaborations. The symposium aims to bring together researchers and practitioners from countries of the Asia-Pacific region in the fields of intelligent systems and evolutionary computation to present ongoing work, exchange ideas, and discuss future collaboration. In 2016, IES was held again in Canberra to celebrate its 20th anniversary.

IES 2016 was hosted by The University of New South Wales (UNSW), at its Canberra campus in the Australian Defence Force Academy (ADFA). It was collocated with two other events: the 24th National Conference of the Australian Society for Operations Research and the Defence Operations Research Symposium. The event included a number of plenary talks, special sessions, oral presentations, and industry workshops for a valuable interaction with researchers and practitioners in the field.

Out of the 51 submissions initially received, 36 were selected to be included in the final proceedings. Each submission was reviewed by 2–4 members from our international program committee.

We would like to thank the steering, organizing, and program committees for their efforts in supporting the symposium. The support and assistance from UNSW, Springer, and EasyChair are gratefully acknowledged.

Canberra, Australia
November 2016

George Leu
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