

CALL FOR PAPERS

Submission deadline: 1st July, 2013

Book Chapters for:

Applied Methods and Techniques for Mechatronic Systems: Modelling, Identification and Control

To be published in “**Lecture Notes in Control and Information Sciences**”

(LNCIS) <http://www.springer.com/series/642>

Description:

Most of the research and experiments in the fields of science, engineering, and social studies have spent significant effort to find rules from various complicated phenomena by principles, observations, measured data, logic derivations. The rules are normally summarised as concise and quantitative expressions or “models”. “Identification” provides mechanisms to establish the models and “control” provides mechanisms to improve the system (represented by its model) performance. The book will reflect the relevant studies in mechatronic fields, with the latest research from interdisciplinary theoretical studies, computational algorithm development to exemplary applications. The readers will benefit from easily tailoring the techniques to accommodate their ad hoc applications. A clear route of each paper, background → motivation → quantitative development (equations) → case studies/illustration/tutorial (curve, table, etc.), is the unique format for readers/users.

This publication will cover a broad range of topics of research, development, and applications of modelling, identification and control, including but not limited to:

- Dynamic modelling theories/techniques/computational algorithms
- Application examples of the above
- Novel and unconventional linear system modelling techniques
- System identification, particularly nonlinear system identification
- Model validation
- Various control techniques
- Nonlinear system control
- Robotics
- Mechatronic system modelling, identification and control
- Biological system modelling, identification and control

- Neural network, fuzzy logic enhanced modelling, identification and control
- Complementary medical system modelling and identification
- Wide range representative application examples
- Quantitative economic/financial and other social system modelling/identification

Author Information:

Papers must be written in English, further information on LNCIS publications can be found via: <http://www.springer.com/series/642>. In addition each paper length should be within 10 --- 20 pages. Springer template is recommended and can be downloaded [here](#).

Submission: Please send ONE copy in the form of an MS Word or PDF file attached to an email (liulei@hust.edu.cn OR Quan.Zhu@uwe.ac.uk) to the Chief Editors.

Important Dates:

Paper submission deadline: 1/7/2013

Author Notification: 1/9/2013

Revised manuscript submission: 1/10/2013

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