Civil-Comp Proceedings

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Proceedings of the
Seventh International Conference on
Engineering Computational Technology

Edited by
B.H.V. Topping, J.M. Adam, F.J. Pallarés
R. Bru and M.L. Romero
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The Seventh International Conference on Engineering Computational Technology
is organised in association with:

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Preface

This volume comprises the summaries of contributed papers presented at The Seventh International Conference on Engineering Computational Technology (ECT 2010) held in Valencia, Spain from 14 to 17 September 2010. The full papers from the conference are available on the accompanying CD-ROM. The ECT conference series began in Edinburgh during 1998. The 2010 conference was held concurrently with The Tenth International Conference on Computational Structures Technology (CST 2010).

The special sessions included in this volume of proceedings are:

- Parallel and Distributed Engineering Computations
  organised by J. Kruis and P. Iványi
- Numerical and Computational Linear Algebra
  organised by F. Pedroche and R. Bru
- Numerical Algorithms for Solving Nonlinear Systems
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- Reduced Modelling in Computational Science and Engineering
  organised by F. Chinesta and E. Cueto
- Computational Analysis for Automotive Applications
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- Mechanical Design and Manufacturing Simulation for Transport Structural Components
  organised by R. Citarella
- Object Oriented Finite Element Methods
  organised by B. Patzák
- Flow and Electromagnetic Fields in Materials Modelling
  organised by K.A. Pericleous
- Virtual Modelling and Visualisation
  organised by A.K. Noor

We are particularly grateful to the organisers of these special sessions.

The following sessions are also included in this volume:

- Computational Modelling and Simulation
- Numerical Techniques in Engineering
- Construction, Maintenance, Project and Planning Engineering
- Information and Database Systems
- Genetic, Evolutionary and other Algorithms inspired by Nature
- Neural Networks
- Data Mining

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• Computer Aided Design
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• Finite Element Methods
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• Nanomechanics
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• Tunneling
• Medical and Bioengineering
• Computational Fluid Dynamics
• Fluid-Structure Interaction
• Shallow Water Problems
• Hydrology
• Traffic and Transport Engineering
• Environmental Engineering

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We would like to thank the “Universidad Politécnica de Valencia”, particularly the “Escuela Técnica Superior de Ingeniería del Diseño” and the “Centro de Formación Permanente”, for their help in the organisation of these conferences.
We are grateful to Jelle Muylle for designing these conference proceedings and for all his administrative and organisational skills in organising these conferences. We also wish to thank Dawn Sewell (Civil-Comp Press) for her administrative support before and during the conference.
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