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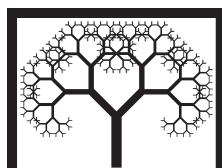
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Innovation in Civil and Structural Engineering Computing

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Preface

This volume comprises the summaries of contributed papers presented at The Eleventh International Conference on Civil, Structural and Environmental Engineering Computing (Civil-Comp 2007) held at St. Julians, Malta from 18 to 21 September 2007. The full papers from the conference are available on the accompanying CD-ROM. This conference is part of the Civil-Comp Series series that commenced in 1983. The 2007 conference was held concurrently with The Ninth International Conference on the Application of Artificial Intelligence to Civil, Structural and Environmental Engineering (AICivil-Comp 2007).

The special sessions included in this volume of Proceedings are:

- Structural Control: Computational Methods, Experimental Validation and Applications
organised by V. Gattulli
- Computational Methods in Geotechnical and Geo-Environmental Engineering
organised by P.J. Fox
- Steel and Composite Steel-Concrete Structures
organised by L.F. Costa Neves
- Structural Optimisation and Sensitivity Analysis
organised by A. Csébfalvi
- Probabilistic Approaches to Structural Mechanics
organised by M. Karama and A. El Hami
- High-Speed Trains: Vehicle and Railway Track Dynamic Analysis and Related Environmental Problems
organised by Z. Dimitrovová, J. Ambrósio and J. Pombo

I am particularly grateful to the organisers of these special sessions.

The following sessions are also included in this volume:

- Software Engineering
- Grid Computing and WWW
- Parallel and Distributed Computing
- Construction Engineering: Planning, Management, Control and Safety
- Transport Engineering
- Building Engineering
- Building Structures: Environmental Aspects
- Environmental Engineering
- Computer Aided Design
- Numerical Methods
- Optimisation: Techniques and Solutions

- Fuzzy Methods: Analysis and Assessment
- Reliability: Analysis and Assessment
- Finite Element Studies
- Non-Linear Finite Element Analysis
- Contact Problems
- Boundary Element Methods
- Beams, Plates and Shells
- Materials Modelling
- Structural Analysis, Modelling and Design
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- Reinforced Concrete: Analysis, Modelling and Assessment
- Damage Modelling and Assessment
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- Seismic and Earthquake Engineering
- Fluid Flow Problems
- Fluid-Structure Interaction
- Masonry Structures
- Soil-Structure Interaction
- Geomechanics
- Offshore Engineering
- Water Engineering

Other papers presented at the conferences in 2007 are published as follows:

- *The Invited Lectures from Civil-Comp 2007 and AICivil-Comp 2007 are published in:*
Civil Engineering Computations: Tools and Techniques, B.H.V. Topping (Editor), Saxe-Coburg Publications, Stirlingshire, Scotland, 2007.
- *The Contributed Papers from AICivil-Comp 2007 are published in:*
Proceedings of the Ninth International Conference on the Application of Artificial Intelligence to Civil, Structural and Environmental Engineering, B.H.V. Topping (Editor), (Book of Abstracts and CD-ROM), Civil-Comp Press, Stirlingshire, Scotland, 2007.

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