

Civil-Comp Proceedings: 97

**Proceedings of the
Second International Conference on Soft Computing Technology in
Civil, Structural and Environmental Engineering**

Civil-Comp Proceedings:

Proceedings of the Second International Conference on Parallel, Distributed, Grid and Cloud Computing for Engineering

Edited by: P. Iványi and B.H.V. Topping

Proceedings of the Tenth International Conference on Computational Structures Technology

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Proceedings of the First International Conference on Parallel, Distributed and Grid Computing for Engineering

Edited by: B.H.V. Topping and P. Iványi

Proceedings of the Ninth International Conference on Computational Structures Technology

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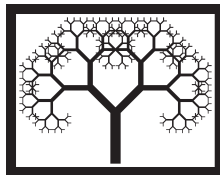
Proceedings of the Fifth International Conference on Engineering Computational Technology

Edited by: B.H.V. Topping, G. Montero, R. Montenegro

**Proceedings of the
Second International Conference on
Soft Computing Technology in
Civil, Structural and Environmental Engineering**

Edited by
Y. Tsompanakis and B.H.V. Topping

Including special sessions organised by
**D.C. Charmpis, N.D. Lagaros, O. Hasańcebi, L. Lamberti,
A.A. Taflanidis, C. Papadimitriou and A. Csébfalvi**



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Preface

This volume comprises the summaries of contributed papers presented at “The Second International Conference on Soft Computing Technology in Civil, Structural and Environmental Engineering” (CSC 2011) held in Chania, Crete, Greece from 6-9 September 2011. The full papers from the conference are available on the accompanying CD-ROM. The CSC conference series began in Madeira, Portugal in 2009. The CSC 2011 conference was held concurrently with “The Thirteenth International Conference on Civil, Structural and Environmental Engineering Computing” (CC 2011).

The special sessions included in this volume of Proceedings are:

- Applied Soft Computing in Structural Analysis and Design
organised by D.C. Charnpis and N.D. Lagaros
- Metaheuristic Optimization of Skeletal Structures
organised by O. Hasançebi and L. Lamberti
- Soft Computing Methods for Analysis, Optimization and Bayesian Updating of Systems under Uncertainty
organised by A.A. Taflanidis and C. Papadimitriou
- Heuristic and Hybrid Metaheuristic Methods for Structural and Environmental Engineering Computing
organised by A. Csébfalvi

We are particularly grateful to the special session organisers.

The following sessions are also included in this volume:

- Neural Computing
- Support Vector Machines
- Fuzzy Inference Systems and Tools
- Inverse Methodologies
- Cellular Automata
- Particle Swarm Optimization
- Genetic Algorithms
- Genetic Algorithms: Hybridisation
- Genetic Programming
- Genetic Operation Tree
- Ant Colony Optimization
- Granular Computing
- Differential Evolution
- Kriging Approximation
- Entropy Maximization
- Data Mining

Other papers presented at the conferences in 2011 are published as follows:

- *The Invited Review Lectures from CC 2011 and CSC 2011 are published in:*
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- *The Invited Lectures from CC 2011 are published in:*
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- *The Invited Lectures from CSC 2011 are published in:*
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- *The Contributed Papers from CC 2011 are published in:*
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