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# Proceedings of the Ninth International Conference on the Application of Artificial Intelligence to Civil, Structural and Environmental Engineering

*Edited by* **B.H.V. Topping** 



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# Preface

This volume comprises the summaries of contributed papers presented at The Ninth International Conference on the Application of Artificial Intelligence to Civil, Structural and Environmental Engineering (AICivil-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 AICivil-Comp series that commenced in 1987. The 2007 conference was held concurrently with The Eleventh International Conference on Civil, Structural and Environmental Engineering Computing (Civil-Comp 2007).

The following sessions are included in this volume:

- Knowledge Engineering
- Genetic Algorithms in Civil and Structural Engineering
- · Soft Computing Tools for Structural Optimisation
- Soft Computing: Damage, Control and Seismic Engineering
- Soft Computing: Geotechnical Engineering
- Neural Networks: Structural Mechanics
- Neural Networks: Civil and Environmental Engineering
- Neural Networks: Materials Modelling
- Ant Colony Optimisation
- Cellular Automata
- Data Mining

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, Stirling, Scotland, 2007.
- The Contributed Papers from Civil-Comp 2007 are published in: Proceedings of the Eleventh International Conference on Civil, Structural and Environmental Engineering Computing, B.H.V. Topping (Editor), (Book of Abstracts and CD-ROM), Civil-Comp Press, Stirling, Scotland, 2007.

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