



## 18TH INTERNATIONAL CONFERENCE ON SOFT COMPUTING CALL FOR PAPERS

June 27-29, 2012, Brno, Czech Republic



Brno, the workplace of the "Father of Genetics" Augustinian friar G. J. Mendel, and the conference organizers, are very pleased to offer a conference platform on modern engineering using the principles of heredity. The International Soft Computing Conference MENDEL 2012 organizers wish to create a base for an exchange of theoretical and practical knowledge of **evolutionary computation** and **computational intelligence**.

You are cordially invited to participate in and attend the 18<sup>th</sup> International Conference on Soft Computing - MENDEL 2012. This year the conference is organized under the auspices of **Brno University of Technology**. The aim of the Soft Computing Conference MENDEL is to serve as a forum to present current and future work as well as to exchange research ideas in this field. All submitted papers will be reviewed by at least two reviewers. Selection criteria will be based on relevance, originality, significance, impact, technical soundness and quality of the presentation. Contributions are expected to provide original results, insights and experimental innovations. The accepted papers will be published in the book series MENDEL as Proceedings (Hard Copy) with ISBN number and as journal series with ISSN number. All accepted papers will be sent to indexing by **WoS**, **INSPEC** and **Scopus** databases. The Mendel papers have been indexed in **ISI Thomson Reuters** since 2008. The selected papers in the area of HPC will be published in **Springer** ([www.HPCbook.info](http://www.HPCbook.info)).

The scope of the conference includes, but is not limited to:

### Innovation and Theory

- Genetic Algorithms, Genetic Programming
- Grammatical Evolution, Differential Evolution
- Swarm Intelligence, Ant Colonies, Artificial Life
- Neural Networks, Fuzzy Logic, Bayesian Methods
- Evolutionary Strategies, Multi-Agent Systems
- Hybrid, Distributed and Parallel Algorithms
- Evolvable Hardware, Chemical Evolution
- Fractals, Chaos, Mathematical Techniques
- Motion Planning, Computer Vision

### Applications

- Optimization Problems, Decision Making
- Control Design, Modeling and Simulation
- Artificial Intelligence, System Identification
- Image Processing, Signal Processing
- Pattern Recognition, Vision System
- Machine Learning, Scheduling Algorithms
- Robotics, Process Industry
- Biomedicine, Chemistry, Physics
- Manufacturing, Business, Economics

An important remark: As every year, the organizers are preparing the special workshop as important part of the conference. The workshop will include discussion, music, conference dinner and pleasant experience.



**Mendel 2012 Secretary:** Brno University of Technology, FME, IACS, Department of Applied Computer Science  
Technická 2, 616 69 Brno, Czech Republic, phone: +420 54114 3334, 2298, fax: +420 54114 2222, [mendel@fme.vutbr.cz](mailto:mendel@fme.vutbr.cz)

**Organizing Committee:** *General Chair:* Radek Matousek, [matousek@fme.vutbr.cz](mailto:matousek@fme.vutbr.cz), *Honorary Chair:* Pavel Osmera  
*International Chairs:* Jouni Lampinen (Finland), Ronald Hochreiter (Austria), Lars Nolle (UK)

### Important Dates:

**May 14** Full Paper Submission  
**May 27** Notification Acceptance



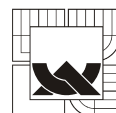
THOMSON REUTERS



INSPEC

LIBRARY  
HSTLIB

TIB  
UB



UNIVERSITY  
of  
VAASA

IT4Innovations  
Centrum excellence