



First Call for Papers



7th International Conference on Hybrid Intelligent Systems (HIS'07)

17-19 September 2007, TU Kaiserslautern,
Kaiserslautern, Germany

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Objectives: Hybridization provides the leverage to deal with complexity and performance challenges imposed on intelligent systems and their physical embodiment by current and emerging applications. The conference goals are to provide a forum for advanced methods from neural computing, machine learning, fuzzy logic, evolutionary algorithms, agent-based methods, quantum computing, and related techniques and their combination to efficient systems answering challenges from all disciplines of Science, Business, Engineering, Automotive, Medicine, Health, Environment, Horticulture, Agriculture, Bio-security, Biometrics, Bioinformatics, or Social Sciences. In particular, approaches to systematic or automated intelligent system design, also explicitly including constraints of physical embodiments, distributed systems and implementations, as well as dynamic aspects of system evolution or adaptation to changing environment is a major focus of the conference.

Topics include but are not limited to:

- Novel & hybrid methods of soft computing, neural & evolutionary computing, signal & image processing
- Methodology & frameworks for automated HIS design
- HIS applications
- Evolving/adaptive HIS
- Intelligent Sensor systems
- Self-monitoring sensor system
- Organic Computing systems
- Wireless intelligent sensor systems
- Distributed intelligent systems/sensor networks
- Bio-inspired HIS hardware

Venue: The University of Kaiserslautern is situated in the heart of Europe and features excellent connections to major cities and hubs. It features a focus on information technology which is underpinned by a growing number of major research institutes settled in a science and research park adjacent to the campus. The unique location of the university and the city in the centre of the Palatinate forest is perfect for numerous sportive and recreational activities. In addition, a wide range of theatres, art galleries, museums and entertainments are available and historic and scenic locations are in easy reach.

Submission and Registration: Tutorial and special session proposals are solicited by email to the general chairs. Full paper of 6 pages (A4 size) for oral presentation and 4 pages for poster presentation should be formatted following the IEEE Journal format and be submitted via the conference home page by **31 May, 2007**. **Notification of acceptance: 30 June, 2007, camera ready papers due: 15 July, 2007**. Registration to be announced on the conference home page.

Publications: Proceedings publication by IEEE Computer Society Press is intended. Selected and extended papers will be published in several special issues including the Int. Journal of Hybrid Intelligent Systems (more to be announced).

Invited speakers: Prof. Takeshi Yamakawa, KIT, Japan; Dr. Yaochu Jin, Honda, Germany; Prof. Carlos M. Fonseca, University of Algarve, Portugal; Prof. Nikola Kasabov, KEDRI, New Zealand.

Exposition and technical demonstrations: Proposals for expositions and technical demonstrations are solicited from academic and industrial contributors along with an outline of technical requirements to the exhibition chair by **31 May, 2007**.

Co-Sponsors (tentative):

Phytec Messtechnik GmbH, Mainz



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