

Editorial

A decade of ICAE

A decade has passed since I founded the international journal **Integrated Computer-Aided Engineering** (ICAE) “*based on the premise that interdisciplinary thinking and synergistic collaboration of disciplines can solve complex problems, open new frontiers, and lead to true innovations and breakthroughs*”, as noted in my Editorial in the inaugural issue of the journal published in July 1993. In the same Editorial I also wrote “*The focus of ICAE is the integration of leading edge and emerging computer technologies for innovative solution of engineering problems. The journal fosters interdisciplinary research and presents a unique forum for innovative computer-aided engineering (CAE). It will also publish novel industrial applications of CAE, thus helping to bring new computational paradigms from research labs and classrooms to reality.*”

The interdisciplinary thinking in research advocated by ICAE a decade ago is proven to be the foundation of the innovative research. The journal will continue the same interdisciplinary focus and encourage breaking the traditional boundaries of engineering disciplines and their integration with new and emerging computing and information technologies (IT). The next frontier will be integration of engineering, biomedical sciences, and IT. ICAE is expected to be a leader in this frontier in the coming decade.

A special feature of ICAE is frequent publication of special issues. Among many special issues published during the first decade of publication of the journal, reflecting the breadth and truly interdisciplinary nature of the journal, are

- Object-Oriented Manufacturing Systems
- Artificial Intelligence in Manufacturing and Robotics
- Intelligent Information Systems
- Real-Time Intelligent Control Systems
- Integrated Product and Process Data Management
- Faults in Automated Manufacturing
- Massively Parallel Computing
- Intelligent Manufacturing Systems

- Low Power Electronic Systems
- Design of Embedded Computer Systems
- Real-Time Engineering Systems
- Neural Techniques for Industrial Application
- Distributed Computing and Networking
- Intelligent Autonomous Vehicles
- Architectural Trends for Image Processing and Machine Vision
- Industrial Applications of the Wavelet Transforms
- Agent-Based Manufacturing
- Artificial and Computational Intelligence for Decision, Control, and Automation
- Evolutionary Computing and Neural Networks
- Autonomous and Cooperative Agents for Industry

Publication of special issues continues to be a frequent feature of ICAE. The current issue is devoted to Multi-Sensor Image Processing and Systems. Other planned special issues include

- Engineering Intelligent Systems,
- Multi-Agent Systems
- Climbing Robots,
- Fuzzy Logic,
- Digital Human Modeling,
- Computer Vision/Computer Graphics Collaboration for Model-based Imaging, Rendering, and Image Analysis, and
- Computer-Aided Engineering Methods in Molecular Biology and Drug Design

The manuscripts submitted for possible publication in the journal are reviewed by at least three reviewers selected among the members of the Editorial Advisory Board of the journal and nearly 500 other researchers from many different countries reflecting the true interdisciplinary and international audience of the journal. Many of these reviewers have agreed in advance to review manuscripts for the journal by filling out the journal *Conscientious Reviewer* form. The 348 individuals who have reviewed manuscripts for the journal in re-

cent years are acknowledged at the end of this editorial. Our apologies for names omitted inadvertently, especially those reviewers whose names were not submitted to me by some of the guest editors.

Hojjat Adeli
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