

Fourth International Workshop on Energy Minimization Methods in Computer Vision and Pattern Recognition – EMMCVPR 2003

July 7-9, 2003

Lisbon, Portugal

Call for Papers

Many problems in computer vision and pattern recognition (CVPR) are couched in the framework of optimization. The minimization of a global quantity, often referred to as the *energy*, forms the bulwark of most approaches in CVPR. Disparate approaches such as discrete and probabilistic formulations on the one hand, and continuous, deterministic strategies on the other, often have optimization or energy minimization as a common theme. Instances of energy minimization arise in Gibbs/Markov modeling, Bayesian theory, geometric and variational approaches and in areas in CVPR such as object recognition/retrieval, image segmentation, registration, reconstruction, classification and data mining.

The aim of this workshop, the fourth in a series, is to bring together researchers with interests in these disparate areas, but with an underlying commitment to some form of optimization. Although the subject is traditionally well represented in major conferences on CVPR, this workshop provides a forum wherein researchers can report their recent work and engage in more informal discussions. As with the previous editions (1997, 1999, and 2001) the proceedings will be published by Springer Verlag in the Lecture Notes on Computer Science (LNCS) series.

The scientific program of EMMCVPR-2003 will include invited talks and contributed research papers. The workshop is sponsored by the International Association for Pattern Recognition and will be held in *Instituto Superior Tecnico (IST)*, Technical University of Lisbon, co-organized by the Institute of Telecommunications (IT).

A list of topics includes (but is not restricted to):

- Gibbs/Markov modeling
- Probabilistic networks and graphical models
- Variational formulations, level sets, and PDEs
- Deformable models and registration
- Graph matching
- Statistical pattern recognition
- Supervised and unsupervised learning
- VC-theory and support vector machines
- Information theoretic methods and model selection
- Combinatorial optimization
- Interior point methods
- Image reconstruction and coding
- Markov-Chain Monte Carlo methods
- Relaxation labeling
- Advanced mean-field methods
- Self-organizing networks
- Evolutionary / genetic approaches
- Applications

Co-chairs

Mario Figueiredo, IT and IST, Portugal
Anand Rangarajan, University of Florida, USA
Josiane Zerubia, INRIA, France

Program committee

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B. Vemuri, Univ. of Florida, USA
L. Younes, ENS Cachan, France
A. Yuille, UCLA, USA
R. Zabih, Cornell University, USA
S.-C. Zhu, UCLA, USA

Invited speakers

Bill Freeman, MIT, USA.
Alfred Hero, University of Michigan, USA.
Panos Pardalos, University of Florida, USA

Important dates

Paper submission deadline: January 6, 2003
Notification of acceptance: March 1, 2003
Camera-ready paper due: April 1, 2003

For submission instructions and other information please visit our website:

<http://www.emmcvpr.org>