

Modelling, Computation and Optimization in Information Systems and Management Sciences MCO 2008

September 8 – 10, Metz - France
Luxembourg

Organized by

- Laboratoire d'Informatique Théorique et Appliquée LITA, Université Paul-Verlaine, Metz
- Computer Science and Communications Research Unit, University of Luxembourg

Sponsored by (partial list)

- Université Paul-Verlaine, Metz
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The second international conference on Modelling, Computation and Optimization in Information Systems and Management Sciences will cover, traditionally, several fields of Management Sciences and Information Systems: Computer Sciences, Information Technology, Mathematical Programming, Optimization & Operations Research and related areas. It should allow researchers and practitioners to discuss recent developments in models and solutions methods for decision making in Engineering and Information Systems. Contributions to the solution of real-life problems are particularly appreciated.

The refereed Proceedings of MCO'08 will include all papers accepted for the conference and will be published in a Book series *Communications in Computer and Information Science* (CCIS) of Springer. Authors of accepted papers are invited to submit a longer version of their work to be published in two Special Issues of International Journals : *Computational and Management Science* and *Computational Optimization and Applications*.

CALL FOR PAPERS

You are invited to submit the paper in PDF or PS format (limited by 10 pages), using Latex style of Springer that can be downloaded from : <http://www.springer.com/computer?SGWID=0-146-6-466612-0>, in one of the following topics :

AREA 1: OPTIMIZATION AND DECISION MAKING

- Recent developments from different Optimization fields: Nonconvex Programming, Global Optimization, D.C. (Difference of Convex functions) Programming, Semidefinite Programming, Semi-infinite Programming, Multicriteria Optimization, Network Optimization, Graph Algorithms, Mixed Integer Programming, Large-scale Nonlinear Programming, Complementarity and Variational Inequality Problems, Mathematical Programs with Equilibrium Constraints, Optimal Control, Mechanical and Structural Optimization, Shape Optimization, Inverse and Ill-posed Problems, Stochastic Optimization, Robust Optimization, Logic Constraints Programming, Constraint Satisfaction, Heuristic and/or Meta-Heuristic Methods, ...
- Optimization Software
- Novel opportunities of Optimization for Industry and Finance: Models and Optimization Techniques for various applications such as Telecommunications, Supply Chain Management, Auto Manufacturing, Aerospace Engineering, Air Traffic Management, Genomics, Biomedical Engineering, Computational Biology, Financial Optimization, Mechanical and Structural Engineering, ...
- New developments in Classical Optimization Problems (Assignment, Knapsack, Network Design & Graph, Location, Partitioning, Routing & Scheduling)
- Operations Management: Management - Logistics, Project Management, Production Planning and Scheduling, Location and Layout, Routing and Distribution, Resource Allocation, Flexible Manufacturing, Supply Chain Management, Conducts of Complex Industrial Systems, Simulation in Engineering

AREA 2: DATA MINING THEORY, SYSTEMS AND APPLICATIONS

- Foundations of Data Mining
- Data Mining and Machine Learning Algorithms and Methods (in traditional areas such as Classification, Regression, Clustering, Probabilistic Modeling, and Association Analysis, and in new areas), Statistics and Probability in Large-Scale Data Mining, Optimization Techniques for Data Mining, Neural Nets & Simulation
- Soft Computing (including Neural Networks, Fuzzy Logic, Evolutionary Computation, and Rough Sets) and Uncertainty Management for Data Mining
- Data Warehousing, OLAP, and Knowledge Discovery
- Human-Machine Interaction and Visualization in Data Mining
- Information Systems and Security
- Business Information Systems
- Data Mining Applications in Electronic Commerce, Bioinformatics, Computer Security, Web Intelligence, Intelligent Learning Database Systems, Finance, Marketing, Healthcare, Telecommunications, and other fields

AREA 3: COMPUTER VISION AND IMAGE PROCESSING

- Computer and VLSI design
- Computed Tomography
- Pattern Recognition
- Audio, Image, Video Processing
- Medical Image Processing
- Optimization Techniques for Image Processing
- Multimedia Computing Systems and Appliances
- Multimedia Applications

AREA 4 : COMPUTER COMMUNICATIONS AND NETWORKS

- Cross-Layer Design and Optimization
- Communications & Information Theory
- Signal Processing for Communications
- Network Security
- Networking Algorithms and Performance Evaluation

AREA 5 : OPTIMIZATION AND SEARCH TECHNIQUES FOR SECURITY, RELIABILITY, TRUST

- Intrusion detection
- Cryptography, Cryptanalysis
- Security protocols
- Quality of Services
- Trust Management
- Software Validation and Verification
- Certification of Results
- etc.

Submissions should be done via the website: <http://lita.sciences.univ-metz.fr/~mco08/>

IMPORTANT DATES

Paper submission:	May 18, 2008
Author notification:	June 15, 2008
Early registration:	July 5, 2008
Last version of accepted papers:	July 10, 2008
Conference dates:	September 8 to 10, 2008
Paper submission to special issues:	November 30, 2008