

Name

Domenico Conforti

Role Professore Ordinario

## Short CV

Scientific Responsible and Coordinator of LIME, his areas of research activities and expertise are the design and development of computational models and numerical algorithms for the solution of decision making problems. Particular attention has been devoted to the development of (i) decision support systems and services for health care and clinical decision problems, (ii) optimization models for the effective and efficient organization and management of health care services delivery. He has been involved in many research projects at national and international level. He is co-author of several papers in refereed journals on numerical methods for nonlinear optimization, computational engineering and parallel algorithms, and models and methods for the healthcare organization and management.

## **Selected Publications**

S. Khodaparasti, H. R. Maleki, M. E. Bruni , S. Jahedi, P. Beraldi, D. Conforti, Balancing efficiency and equity in location-allocation models with an application to strategic EMS design, Optimization Letters 10/5 (2016) 1053-1070.

M.L. Bruni, P. Beraldi, D. Conforti, A Stochastic programming approach for operating theatre scheduling under uncertainty, IMA Journal of Management Mathematics, 26/1 (2015) 99-119.

M.E. Bruni, P. Beraldi, D. Conforti, A stochastic programming approach for the strategic valve locations problem in a water distribution system, Procedia - Social and Behavioral Sciences, 108 (2014) 129 – 138.

D. Conforti, F. Guerriero, R. Guido, M. Veltri, An optimal decision making approach for the management of radiotherapy patients, OR Spectrum 33 (2011) 123-148.

D. Conforti, F. Guerriero, R. Guido, M. Matucci Cerinic, M.L. Conforti, An optimal decision making model for supporting Week-Hospital management, Health Care Management Science 14 (2011) 74-88.

## Lines of research

1. Optimization Models and Methods for Planning and Management of Healthcare Services.

- 2. Optimization Models and Methods for Healthcare and Clinical Decision Support.
- 3. Healthcare and Clinical Decision Support Systems and Services.
- 4. Optimization Models and Methods for Machine Learning Problems and Data Analysis.
- 5. Models, Methods and Applications of Integer Linear and Nonlinear Stochastic Programming.
- 6. Sequential and Paralle Algorithms for Nonlinear Programming Problems.
- 7. Optimization Models and Methods for the Management of Electric Energy.
- 8. Curvilinear Trajectory Approaches for Unconstrained Optimization Problems.
- 9. Automatic Differentiation Techniques for Nonlinear Programming Algorithms.