

CURRICULUM VITAE

Domenico CONFORTI

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SUMMARY

Scientific Coordinator of Laboratory of Innovation and Management Engineering (LIME) and Responsible of the Healthcare Service Delivery section (deHealth Lab - www.dehealthlab.it), 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 decision support systems and services for healthcare and clinical decision making problems, the development of optimization models for the effective and efficient planning and management of healthcare services delivery. He has been and is currently involved in research projects sponsored by the Italian Ministry of Research, European Commission and National Research Council of Italy. 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, planning and management.

EMPLOYMENT RECORDS

- University of Calabria (Italy), Full Professor, DIMEG, January 2016 - current position.
- University of Calabria (Italy), Associate Professor, Faculty of Engineering (September 2001 - December 2012), DIMEG (January 2013 - December 2015).
- University "Magna Graecia" of Catanzaro (Italy), Adjunct Professor in Applications of Operations Research to Healthcare, Faculty of Medicine, November 2004 – October 2012.
- University of Salento (Italy), Adjunct Professor in Operations Research, Faculty of Engineering, November 1995 - October 1998.
- University of Calabria (Italy), Assistant Professor, Faculty of Engineering, February 1992 - August 2001.
- University of Calabria (Italy), Adjunct Professor in Operations Research, Faculty of Engineering, November 1988 - October 1991.
- University of Calabria (Italy), Scientific and Technical Assistant on Italian Ministry of Education Research Funds, November 1984 - October 1988.

SCIENTIFIC RESEARCH INTERESTS

- Quantitative Models, Methods and Algorithms for Decision Making Problems.
- Optimization Models and Methods for Planning and Management of Healthcare Delivery.
- Optimization Models and Methods for Machine Learning Problems.
- Models and Methods for Nonlinear Stochastic Programming.
- Algorithms for Nonlinear Programming Problems.

EXPERIENCES AT INTERNATIONAL RESEARCH INSTITUTIONS

- VISITING SCIENTIST at "CENTER FOR THE MATHEMATICAL SCIENCES", UNIVERSITY OF WISCONSIN, Madison (USA) - 1993.
- RESEARCH SCIENTIST at "EUROPEAN CENTER FOR SCIENTIFIC AND ENGINEERING COMPUTING" (E.C.S.E.C.), IBM, Roma (Italy) - 1988.
- RESEARCH FELLOW at "MATHEMATICS RESEARCH CENTER", UNIVERSITY OF WISCONSIN, Madison (USA) - 1986.

- RESEARCH FELLOW at "INSTITUT FÜR STATISTIK UND MATHEMATISCHE WIRTSCHAFTSTHEORIE", UNIVERSITÄT KARLSRUHE, Karlsruhe (Germany) - 1985.

NATIONAL AND INTERNATIONAL RESEARCH PROJECTS

National Projects

1. "NET4HEALTH - NETWORK for HEALTH management" (Italian Ministry of Economic Development, 2017-2020) - Scientific Responsible of the Project.
2. "ALCMEONE – Integrated Clinical Planning and Management of Cephalalgic Patients: Innovative Architectural Organization and Advanced Technological Platform of Services for supporting the integration of Patient-Centered Healthcare Pathways" (Italian Ministry of Economic Development, 2017-2020) - Scientific Responsible of the Project.
3. "HEARTNETICS – Advanced Analytics for Heart Diseases Management" (European Funding, Calabria Region, Italy, 2017-2020) - Scientific Responsible of the Project.
4. "OuTRIGHT: OperaTions Research for Improving inteGrated HealThcare" (Italian Ministry of University and Research PRIN 2015. Approved, Not Funded) - Scientific Responsible and Project Coordinator.
5. "NEUROMEASURES - Development of innovative processes and supporting services for early diagnosis of motor, behavioural and memory disfunctions in patients affected by Parkinson disease and Alzheimer disease" (Italian Ministry of University and Research, Grant PON03_PE_00009_1, 2013-2016) - Scientific Responsible of Research Unit.
6. "HEARTDRIVE - Effective and Efficient Services for the Integrated Clinical Management of Heart Failure and its Comorbidities" (Calabria Region, Italy, European Funds for Regional Development, Grant J54E07000180005, 2014-2015) - Scientific Responsible of the Project.
7. "NEUROSTAR – Neuroscience and Systems, Technologies and Advanced procedures for early Diagnosis/Prognosis and functional Recuperation/Compensation of disabilities in subjects with severe acquired brain damage" (Italian Ministry of University and Research, Grant PON01_01180, 2011-2015) - Scientific Responsible of Research Unit.
8. "HEALTHSOAF - A framework of Service Oriented Architecture for Health Care Delivery" (Italian Ministry of University and Research, Grant PON01_02934, 2011-2015) - Scientific Responsible of Research Unit.
9. "Statistical Methods and Machine Learning Techniques for Multilocus Analysis of Frailty Data"(Italian Ministry of University and Research PRIN 2007-08. Approved, Not Funded) - Scientific Responsible of Research Unit.
10. "MIMERICA - Intelligent Environments and Decision Support Systems for the Clinical Management and Rehabilitation of patients affected by Traumatic Brain Injury" (Italian Ministry of University and Research, Grant MIUR-6653, 2004-2007) - project manager of Research Unit.
11. "Peer-To-Peer Models and Technologies for supporting Distributed Health Care Systems and Services" (Calabria Region, Italy, European Funds for Regional Development, 2004-2005) - project manager of Research Unit.
12. "Decision Support Systems for the Optimal Management of Electric Energy Market" (Italian Ministry of University and Research PRIN 2005) - project manager of Research Unit.
13. "Methods and Techniques for the Optimal Portfolio Management and Evaluation of Financial Assets" (Italian Ministry of University and Research PRIN 2002) - project manager of Research Unit.
14. "Optimization Algorithms for Complex Systems" (Italian Ministry of University and Research PRIN 1999) - project manager of Research Unit.
15. "Optimization Models and Methods for Financial and Biomedical Applications" (Italian Ministry of University and Research PRIN 1997) - project manager of Research Unit.
16. "Parallel Algorithms for the Optimal Management of Electric Energy" (National Research Council of Italy) - member and project manager of Research Unit.
17. "Parallel Algorithms for Transportation Problems" (National Research Council of Italy) - member and project manager of Research Unit.
18. "Parallel Algorithms for Large Scale Optimization Problems" (National Research Council of Italy) - member and project manager of Research Unit.

European Projects

1. "I-MANAGE: IMPROVING PATIENT SELF-MANAGEMENT OF HEALTH AND DISEASE IN SYSTEMIC AUTOIMMUNE DISEASES: THE CHALLENGE OF SYSTEMIC LUPUS ERYTHEMATOSUS" (European Commission HORIZON 2020, PHC-28-2015, Proposal 690113. Approved Score 14/15, Not Funded) - Scientific Responsible of Research Unit.

2. "BUTTERFLY: MOBILE SOLUTIONS FOR PATIENT EMPOWERMENT IN THE MANAGEMENT OF SYSTEMIC LUPUS ERYTHEMATOSUS" (European Commission HORIZON 2020, PHC-26-2014, Proposal 653878. Approved Score 13/15, Not Funded) - Scientific Responsible of Research Unit.
3. "SKIPPER: SERVICES AND KNOWLEDGE BASED INFRASTRUCTURE FOR DEFINING AND SUPPORTING NEW INTEGRATED, PERSONALIZED AND EFFICIENT CARE PATHWAYS IN COPD AND ITS COMORBIDITIES" (European Commission FP7, ICT-10-5.1, Proposal 611331, 2010. Approved Score 11/15, Not Funded) - Scientific Responsible of Research Unit.
4. "HEARTFAID: A KNOWLEDGE BASED PLATFORM OF SERVICES FOR SUPPORTING MEDICAL-CLINICAL MANAGEMENT OF HEART FAILURE WITHIN ELDERLY POPULATION" (European Commission FP6, ICT for Health, Grant 027107, 2006-2009) - Scientific Responsible and Project Coordinator.
5. "High Performance Computing for Finance" (European Commission FP4, INCO, Grant IP951139, 1996-1999) - member and project manager of Research Unit.
6. "EUROMED: web-based standards for Telemedicine Applications" (European Commission IS-ISIS '95, 1995-1998) - member and project manager of Research Unit.
7. "Molecular Dynamics Simulation of Complex Molecular Systems on Massively Distributed Memory Computers" (European Commission FP3, HCM, Grant CHRX930092, 1993-1996) - member and project manager of Research Unit.

SCIENTIFIC AND TECHNICAL EXPERIENCES – AWARDS

- Peer review of several scientific journals in Operations Research, Healthcare Management, Applied Mathematics in Biomedical and Clinical Research and Life Sciences.
- Scientific Responsible of Laboratory of Innovations and Management Engineering (LIME), at DIMEG, University of Calabria.
- Scientific and Technical Evaluator for the Calabria, Campania and Marche Regional Governments (Italy).
- Scientific and Technical Evaluator for the "Cancer Research Society" (UK), "FWO - Flanders Research Foundation" (BE), "SNSF - Swiss National Science Foundation" (CH).
- IMA Journal of Management Mathematics: 2015 Best Paper Prize "Bruni ME, Beraldi P, Conforti D (2015). A stochastic programming approach for operating theatre scheduling under uncertainty. IMA JOURNAL OF MANAGEMENT MATHEMATICS, vol. 26, p. 99-119, ISSN: 1471-6798, doi: 10.1093/imaman/dpt027".

BIBLIOMETRICS (Feb 2020)

- SCOPUS - Author ID 35616314600 – Documents 75, Citations 933, h-index 17
- ISI Web of Science - Researcher ID: D-2734-2011 – Documents 82, Citations 681, h-index 16
- Google Scholar – Documents 104, Citations 1565, h-index 21

ACADEMIC SERVICE

- University of Calabria (Italy), Responsible and Coordinator of the Academic Quality Assurance Unit.
- ANVUR (ITALIAN NATIONAL AGENCY FOR THE EVALUATION OF UNIVERSITIES AND RESEARCH INSTITUTES), Expert for Accreditation of Universities and their Programmes.

TEACHING ACTIVITIES

- University of Calabria (Italy), Faculty of Engineering, undergraduate and graduate courses of: Operations Research, Optimization Theory and Algorithms, Models and Methods for Healthcare Services Planning and Management, Models and Methods for Healthcare Decision Support Services, Machine Learning Models and Methods, Calculus.
- University "Magna Graecia", Catanzaro (Italy), Faculty of Medicine, undergraduate and graduate courses of: Applications of Operations Research for Planning and Management of Healthcare Services, Medical Decision Support Systems.
- University of Salento (Italy), Faculty of Engineering, course of: Operations Research.
- Member of the PhD Research Schools in "Operations Research" (until 2012) and "Life Sciences" (from 2013).

PUBLICATIONS

AI. INTERNATIONAL PEER REVIEW JOURNALS

[AI-1] D. Conforti, L. Grandinetti, "An experience of advanced computation techniques in the solution of nonlinearly constrained optimization problems", *Lecture Notes in Economics and Mathematical Systems* 304 (1987) 69 - 85.

[AI-2] L. Grandinetti, D. Conforti, "Numerical comparisons of nonlinear programming algorithms on serial and vector processors using automatic differentiation", *Mathematical Programming* 42 (1988) 375 - 389.

[AI-3] D. Conforti, L. Grandinetti, R. Musmanno, M. Cannataro, G. Spezzano, D. Talia, "A model of efficient asynchronous parallel algorithms on multicomputer systems", *Parallel Computing* 18 (1992) 31 - 45.

[AI-4] D. Conforti, R. Musmanno, "A parallel asynchronous Newton algorithm for unconstrained optimization", *Journal of Optimization Theory and Applications* 77 (1993) 305 - 322.

[AI-5] D. Conforti, L. Grandinetti, R. Musmanno, "A parallel tensor algorithm for nonlinear optimization", *Optimization Methods and Software* 3 (1994) 125 - 142.

[AI-6] D. Conforti, L. De Luca, "Optimal management of electric power systems via high performance computing", *Lecture Notes in Computer Science* 919 (1995) 366 - 371.

[AI-7] D. Conforti, R. Musmanno, "Convergence and numerical results for a parallel asynchronous Quasi-Newton method", *Journal of Optimization Theory and Applications* 84 (1995) 293 - 310.

[AI-8] D. Conforti, L. De Luca, L. Grandinetti, R. Musmanno, "A parallel implementation of Automatic Differentiation for partially separable functions using PVM", *Parallel Computing* 22 (1996) 643 - 656.

[AI-9] D. Conforti, L. Grandinetti, C. Triki, "A Parallel Algorithm for the Optimal Power Flows Problem", *Lecture Notes in Computer Science* 1067 (1996) 942 - 943.

[AI-10] D. Conforti, R. Musmanno, "A Parallel Algorithm for Unconstrained Optimization based on Decomposition Techniques", *Journal of Optimization Theory and Applications* 95 (1997) 531 - 544.

[AI-11] L. Grandinetti, D. Conforti, L. De Luca, "CAMD and TeleEEG: Software Tools for Telemedicine Applications", *Lecture Notes in Computer Science* 1401 (1998) 64 - 73.

[AI-12] D. Conforti, L. De Luca, "Computer Implementation of a Medical Diagnosis Problem by Pattern Classification", *Future Generation Computer Systems* 15 (1999) 287 - 292.

[AI-13] M. Al-Baali, D. Conforti, R. Musmanno, "Computational Experiments with Scaling the Initial Hessian Approximation for the Broyden Family Methods", *Optimization* 48 (2000) 375 - 389.

[AI-14] D. Conforti, M. Mancini, "A Curvilinear Search Algorithm for Unconstrained Optimization by Automatic Differentiation", *Optimization Methods and Software* 15 (2001) 283 - 297.

[AI-15] B. Commisso, D. Conforti, A. Sciacqua, D. Costanzo, L. Marando, "Classificatori Support Vector Machine per la diagnosi dell'Infarto Miocardio Acuto", *Giornale Italiano di Cardiologia Pratica* (2004) 2: 63-68.

[AI-16] P. Beraldi, D. Conforti, C. Triki, A. Violi, "Constrained Auction Clearing in the Italian Electricity Market", *4OR* 2 (2004) 35 - 51.

[AI-17] P. Beraldi, M.E. Bruni, D. Conforti, "Designing Robust Emergency Medical Service via Stochastic Programming", *European Journal of Operational Research* 158/1 (2004) 183 - 193.

- [AI-18] D. Conforti, D. Costanzo, R. Guido, "Cancer Prognostic Evaluation via Support Vector Machines", *International Scientific Journal of Computing* 3 (2004) 29 - 34.
- [AI-19] D. Conforti, R. Guido, "Kernel based Support Vector Machine Classifiers for early detection of Myocardial Infarction", *Optimization Methods and Software* 20 (2005) 395 - 407.
- [AI-20] M.E. Bruni, D. Conforti, N. Sicilia, S. Trotta, "A New Organ Transplantation Location-Allocation Policy: a case study of Italy", *Health Care Management Science* 9 (2006) 125 – 142.
- [AI-21] D. Conforti, et al., "HEARTFAID: A Knowledge Based Platform for Supporting the Clinical Management of Elderly Patients with Heart Failure", *Journal of Information Technology in Health Care* 4(5) (2006) 283 – 300.
- [AI-22] D. Conforti, D. Costanzo, R. Guido, "On Medical Decision Making: a Case Study within Cardiology Domain", *Journal of Information Technology in Health Care* 5(6) (2007) 343 – 356.
- [AI-23] M.L. Bruni, D. Conforti, C. Ieropoli, "La Pianificazione Ottimale dei Flussi di Lavoro nei Laboratori di Analisi Cliniche", *La Rivista Italiana della Medicina di Laboratorio* (2007) 3(3): 178-188.
- [AI-24] P. Beraldi, D. Conforti, A. Violi, "A Two-Stage Stochastic Programming Model for Electric Energy Producers", *Computers and Operations Research* 35 (2008) 3360 – 3370.
- [AI-25] D. Conforti, F. Guerriero, R. Guido, "Optimization Models for Radiotherapy Patient Scheduling", *4OR* 6 (2008) 263 - 278.
- [AI-26] G. Dolce, F. Riganello, M. Quintieri, A. Candelieri, D. Conforti, "Personal Interaction in Vegetative State. A Data-Mining Study", *Journal of Psychophysiology* 22(3) (2008) 150-156. DOI: 10.1027/0269-8803.22.3.150
- [AI-27] F. Riganello, M. Quintieri, A. Candelieri, D. Conforti, G. Dolce, "Heart Rate Response to Music: an artificial intelligence study on healthy and traumatic brain injured subjects", *Journal of Psychophysiology* 22(4) (2008) 166-174. DOI: 10.1027/0269-8803.22.4.166
- [AI-28] P. Beraldi, M.E. Bruni, D. Conforti, "The Stochastic Trim Loss Problem", *European Journal of Operational Research* 197 (2009) 42 - 49. DOI: 10.1016/j.ejor.2008.04.042
- [AI-29] P. Beraldi, M.E. Bruni, D. Conforti, E. Tundis, "Probabilistically Constrained Models for Efficiency and Dominance in DEA", *International Journal of Production Economics* 117 (2009) 219–228. DOI: 10.1016/j.ijpe.2008.10.011
- [AI-30] P. Beraldi, M.E. Bruni, D. Conforti, "A Solution Approach for Two-Stage Stochastic Nonlinear Mixed Integer Programs", *Algorithmic Operations Research* 4 (1) (2009) 76–85.
- [AI-31] V. Lagani, A. Montesanto, F. Di Cianni, V. Moreno, S. Landi, D. Conforti, G. Rose, G. Passarino, "A novel similarity-measure for the analysis of genetic data in complex phenotypes", *BMC Bioinformatics* 10(Suppl 6):S24 (2009), 1-8, DOI: 10.1186/1471-2105-10-S6-S24
- [AI-32] D. Bonfiglio, S. Catalano, A. Perri, M.P. Baldini, S. Marsico, A. Tagarelli, D. Conforti, R. Guido, S. Andò, "Beneficial effects of iodized salt prophylaxis on thyroid volume in an iodine deficient area of Southern Italy", *Clinical Endocrinology* 71 (2009), 124–129, DOI: 10.1111/j.1365-2265.2008.03432.x
- [AI-33] P. Beraldi, D. Conforti, A. Violi, "SICOpt: a solution approach for Nonlinear Integer Stochastic Programming Problems", *Journal of Optimization Theory and Applications* 143 (2009) 17-36, DOI: 10.1007/s10957-009-9555-y

- [AI-34] D. Conforti, F. Guerriero, R. Guido, "Non-Block Scheduling with Priority in Radiotherapy Treatments", *European Journal of Operational Research* 201 (2010) 289-296, DOI: 10.1016/j.ejor.2009.02.016
- [AI-35] D. Conforti, R. Guido, "Kernel based Support Vector Machine via Semidefinite Programming: Application to Medical Diagnosis", *Computers and Operations Research* 37 (2010) 1389-1394, DOI: 10.1016/j.cor.2009.02.018
- [AI-36] A. Candelieri, D. Conforti, "A Hyper-Solution Framework for SVM Classification: Application for Predicting Destabilizations in Chronic Heart Failure Patients", *The Open Medical Informatics Journal* 4 (2010) 135-139, ISSN: 1874-4311
- [AI-37] L. Amanzi, F. Braschi, G. Fiori, F. Galluccio, I. Miniati, S. Guiducci, M.L. Conforti, O. Kaloudi, F. Nacci, O. Sacu, A. Candelieri, A. Pignone, L. Rasero, D. Conforti, M. Matucci Cerinic, "Digital ulcers in scleroderma: staging, characteristics and sub-setting through observation of 1614 digital lesions", *Rheumatology* 49 (2010) 1374-1382, DOI: 10.1093/rheumatology/keq097
- [AI-38] D. Lofaro, S. Maestripieri, R. Greco, T. Papalia, D. Mancuso, D. Conforti, R. Bonofiglio, "Prediction of Chronic Allograft Nephropathy using Classification Trees", *Transplantation Proceedings* 42 (4) (2010) 1130-1133, DOI: 10.1016/j.transproceed.2010.03.062
- [AI-39] O. Kaloudi, F. Bandinelli, E. Filippucci, M.L. Conforti, I. Miniati, S. Guiducci, F. Porta, A. Candelieri, D. Conforti, G. Grassiri, W. Grassi, M. Matucci Cerinic, "High frequency ultrasound measurement of digital dermal thickness in systemic sclerosis", *Annals of the Rheumatic Diseases* 69 (6) (2010) 1140-1143. DOI: 10.1136/ard.2009.114843
- [AI-40] A. Montesanto, V. Lagani, C. Martino, S. Dato, F. De Rango, M. Berardelli, A. Corsonello, B. Mazzei, V. Mari, F. Lattanzio, D. Conforti, G. Passarino, "A novel, population specific, approach to define frailty", *Journal of the American Aging Association* 32 (3) (2010) 385-395, DOI: 10.1007/s11357-010-9136-x
- [AI-41] F. Riganello, A. Candelieri, M. Quintieri, D. Conforti, G. Dolce, "Heart rate variability: An index of brain processing in vegetative state? An artificial intelligence, data mining study", *Clinical Neurophysiology* 121 (12) (2010) 2024-2034, DOI 10.1016/j.clinph.2010.05.010
- [AI-42] 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, DOI: 10.1007/s00291-009-0170-y
- [AI-43] 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, DOI: 10.1007/s10729-010-9144-5
- [AI-44] M. Tonacchera, P. Agretti, T. Rago, G. De Marco, F. Niccolai, A. Molinaro, M. Scutari, A. Candelieri, D. Conforti, R. Musmanno, G. Di Coscio, F. Basolo, P. Iaconi, P. Miccoli, A. Pinchera, P. Vitti, "Genetic markers to discriminate benign and malignant thyroid nodules with undetermined cytology in an area of borderline iodine deficiency", *Journal of Endocrinological Investigation* 35 (8) (2012) 754-759.
- [AI-45] F. Bandinelli, D. Melchiorre, F. Scazzariello, A. Candelieri, D. Conforti, M. Matucci-Cerinic, "Clinical and radiological evaluation of sacroiliac joints compared with ultrasound examination in early spondyloarthritis", *Rheumatology* 52 (7) (2013) 1293-7, DOI: 10.1093/rheumatology/ket105
- [AI-46] 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, DOI: 10.1016/j.sbspro.2013.12.826.
- [AI-47] M.L. Bruni, P. Beraldi, D. Conforti, "A Stochastic Programming approach for Operating Theatre Scheduling under Uncertainty", *IMA Journal of Management Mathematics*, 26 (1), 99-119 (2015) DOI:10.1093/imaman/dpt027.

[AI-48] D Conforti, MC Groccia, R Guido, G Ielpa, G Sammarco, R Iannacchero, "Integrated care model for headache patients: a piloting assessment", *CEPHALALGIA* 35, 182-182 (2015).

[AI-49] R Iannacchero, M Cipolla, A Costa, D Conforti, "Improvement in clinical governance of chronic headache by an information network: HealthSOAF-Calabria Headache Network pilot study", *The Journal of Headache and Pain* 16 (Suppl 1), A72 (2015).

[AI-50] 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), 1053-1070 (2016) ISSN: 1862-4472

[AI-51] M.E. Bruni, P. Beraldi, D. Conforti, "Water Distribution Networks Design under Uncertainty", *TOP* 25 (1), 111-126 (2017), DOI: 10.1007/s11750-016-0425-0.

[AI-52] R. Guido, D. Conforti, "A hybrid genetic approach for solving an integrated multi-objective operating room planning and scheduling problem", *Computers and Operations Research* 87, 270-282 (2017) DOI: 10.1016/j.cor.2016.11.009.

[AI-53] R. Iannacchero, C. Mastrandrea, D. Conforti, "Digital health and clinical decision support: The HealthSOAF project and the Calabria Headache Network", *Confinia Cephalalgica* 28 (1), 25-31 (2018), ISSN: 11220279.

[AI-54] Cerasa, A., Lofaro, D., Cavedini, P., Martino, I., Bruni, A., Sarica, A., Mauro, D., Merante, G., Rossomanno, I., Rizzuto, M., Palmacci, A., Aquino, B., De Fazio, P., Perna, G.R., Vanni, E., Olivadese, G., Conforti, D., Arabia, G., Quattrone, A., "Personality biomarkers of pathological gambling: A machine learning study", *Journal of Neuroscience Methods* 294, 7-14 (2018), DOI: 10.1016/j.jneumeth.2017.10.023.

[AI-55] R. Guido, M.C. Groccia, D. Conforti, "An efficient matheuristic for offline patient-to-bed assignment problems", *European Journal of Operational Research* 268(2), 486-503 (2018), DOI: 10.1016/j.ejor.2018.02.007.

[AI-56] G. Ielpa, R. Guido, D. Conforti, "Scheduling Outpatient Day Service Operations for Rheumatology Diseases", *Flexible Services and Manufacturing Journal* (2019), DOI:10.1007/s10696-019-09354-7.

[AI-57] L.F. Lucca, D. Lofaro, L. Pignolo, E. Leto, M. Ursino, M.D. Cortese, D. Conforti, P. Tonin, A. Cerasa, "Outcome prediction in disorders of consciousness: The role of coma recovery scale revised", *BMC Neurology*, 19 (1), 2019, Article number 68, DOI: 10.1186/s12883-019-1293-7.

B. INTERNATIONAL PEER REVIEW VOLUME CHAPTERS

[B-1] L. Grandinetti, D. Conforti, "Optimization of Power Flow in Electric Power Systems via Parallel Processing", in: H.P. Geering, M. Mansour, eds., *Large Scale Systems: Theory and Applications 1986*, pp. 739 - 743, Pergamon Press, Oxford, 1987.

[B-2] Conforti, L. Grandinetti, "Nonlinear optimization codes for real time solution of large scale problems: a case study on the parallel vector supercomputers CRAY X-MP and IBM 3090/VF", in: D.J. Evans, C. Sutti, eds., *Parallel Computing: Methods, Algorithms, Applications*, pp. 201 - 211, Adam Hilger - IOP Publishing Ltd, Bristol, 1989.

[B-3] Conforti, "Performance analysis of nonlinear programming algorithms", in: D.J. Evans, G. R. Joubert, F. J. Peters, eds., *Parallel Computing* 89, pp. 563 - 568, North - Holland, Amsterdam, 1990.

[B-4] D. Conforti, L. Grandinetti, R. Musmanno, "An asynchronous parallel implementation of Newton method for unconstrained optimization problems", in: P. Messina, A. Murli, eds., *Parallel Computing: Problems, Methods and Applications*, pp. 135 - 148, Elsevier Science Publisher, Amsterdam, 1992.

- [B-5] D. Conforti, L. De Luca, R. Musmanno, "Unconstrained optimization on vector - parallel computers", in: C. Brezinski, U. Kulish, eds., *Computational and Applied Mathematics - Algorithms and Theory*, pp. 101 - 110, North - Holland, Amsterdam, 1992.
- [B-6] D. Conforti, L. De Luca, L. Grandinetti, R. Musmanno, "Asynchronous communication on shared memory parallel computers", in: J. Kowalik, L. Grandinetti, eds., *Software for Parallel Computers*, pp. 280 - 293, NATO ASI Serie F, vol. 106, Springer - Verlag, Berlin, 1993.
- [B-7] D. Conforti, L. De Luca, L. Grandinetti, R. Musmanno, "A Parallel Algorithm for Large Scale Nonlinear Optimization on Networked Environments", in: E.H. D'Hollander, G.R. Joubert, F.J. Peters and D. Trystram, eds., *Parallel Computing: State-of-the-Art and Perspectives*, pp. 181 - 187, Elsevier Science Publisher, Amsterdam, 1996.
- [B-8] L. Grandinetti, D. Conforti, L. De Luca, M. Mancini, R. Musmanno, "PARJEN96: A Parallel Software Tool for Automatic Differentiation", in: L. Grandinetti, J. Kowalik, M. Vajtersic, eds., *Advances in High Performance Computing*, pp. 89 - 113, NATO ASI Series, vol. 3/30, Kluwer Academic Publishers, Dordrecht, 1997.
- [B-9] D. Conforti, L. De Luca, "Telecollaboration on EEG data analysis: a pilot experience in Italy", in: A. Marsh, L. Grandinetti, T. Kauranne, eds., *Advanced Infrastructure for Future Healthcare*, pp. 343 - 357, IOS Press, Amsterdam, 2000.
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