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<u>Research interest</u>: Combinatorial optimization; Design and analysis of algorithms; Parallel and distributed algorithms; Soft computing.

Recent publications:

[1] Baumgartner A., Rudec T., Manger R.: *"The design and analysis of a modified work function algorithm for solving the on-line k-server problem"*, **Computing and Informatics, Vol 29** (2010), No 4, 681-700.

[2] Puljić K., Manger R.: "A distributed evolutionary algorithm with a superlinear speedup for solving the vehicle routing problem", Computing and Informatics, Vol 31 (2012), No 3, 675-692.
[3] Rudec T., Baumgartner A., Manger R.: "A fast work function algorithm for solving the k-server problem". Central European Journal of Operations Research - CEJOR, Vol 21 (2013), No 1, 187-205.

[4] Rudec T., Manger R.: "A new approach to solve the k-server problem based on network flows and flow cost reduction", Computers and Operations Research, Vol 40 (2013), No 4, 1004-1013.
[5] Puljić K., Manger R.: "Comparison of eight evolutionary crossover operators for the vehicle routing problem", Mathematical Communications, Vol 18 (2013), No 2, 359-375.

Selected publications:

[1] Manger R., Plantamura V.L. and Souček, B.: *"Stimulus preprocessing for holographic neural networks"*, in **Frontier Decision Support Concepts**, edited by V.L. Plantamura, B. Souček and G. Visaggio, John Wiley and Sons, New York, USA, 1994, pp. 79-90.

[2] Manger R.: *"Solving path problems on a network of computers"*, **Informatica, Vol 26** (2002), No 1, 91-100.

[3] Manger R.: *"Composite path algebras for solving path problems in graphs"*, **ArsCombinatoria**, **Vol 78** (2006), 137-150.

[4] Manger R. and Puljić K: *"Multilayer perceptrons and data compression"*, **Computing and Informatics**, Vol 26 (2007), 45-62.

[5] Rudec T., Baumgartner A., Manger R.: *"A fast implementation of the optimal off-line algorithm for solving the k-server problem"*, **Mathematical Communications, Vol 14** (2009), No 1, 119-134.