Short CV

Jan W. Owsiński

Ph.D., deputy director for research and research scholar at the Systems Research Institute, Polish Academy of Sciences;

Also:
Lecturer, Warsaw Schoolf of Information Technology and Management,
Executive Editor of the English language quarterly *Control and Cybernetics*;
Editor: *Modern Problems in Management*, journal of the Faculty of Management, Warsaw School of Information Technology and Management
President, The Interfaces Institute, Inc.;
Secretary General at the Polish Operations and Systems Research Society.
Member of Editorial Boards of several international journals.

Born: 12 June 1948, Gdańsk, Poland; married, three children;
English, French, Polish and Russian fluently spoken; communicates in German.

Published altogether more than 250 papers and more than 30 edited volumes, the latter largely in English.

Scientific interests: (i) advanced methods and algorithms of data analysis and AI (primarily cluster analysis and preference aggregation) and their applications, mainly in economics, ecology, biology; (ii) knowledge processing and management problems and methods (data-information-knowledge feedback system); (iii) e-Government, e-Economy, e-Society; (iv) economics of the transition countries; (v) environmentally, socially and economically sustainable development, and life quality : notions, models and methods; (vi) transport and logistics – network optimisation.

Headed several research projects, or sub-projects (work-packages), national and international, dealing, chronologically, with (a) modelling of regional agricultural systems; (b) development of interactive data analysis software for in-session use; (c) data analysis systems for business populations (Polish enterprises in transition); (d) modelling of Polish economy in the period of transition (direct input into the demographic module); (e) distance teaching on sustainable development (PHARE); (f) integrated DSS for transboundary catchments (FP5); (g) e-administration & local networks vis a vis local development in conditions of the information society and knowledge economy; (h) logistic and transport systems modelleg through graph (and hypergraph) network representations.

Illustrative publications in English language:

I. Data analysis, knowledge engineering and applications:

Owsinski J.W. (1996) Clustering- distances, and knowledge from data. In: *Ordinal and Symbolic Data Analysis*, E.Diday, Y.Lechevallier and O.Opitz, eds. Springer, Berlin-Heidelberg, 277-287.

Owsinski J.W. and Sl. Zadrozny (2000) Structuring the set of MPs in Polish parliament: a simple clustering exercise. *Annals of Operations Research*, 97, 15-29.

Owsinski J.W. and Sl. Zadrozny (2000) Suicide rates and their patters vs. measurement of quality of life. In: *Aspects of Quality of Life*, W. Ostasiewicz, ed. Wroclaw University of Economics, Wroclaw, 263-285.

Owsinski J.W. (2001) Cluster-wise model identification. In: *Computer Data Analysis and Modelling. Robustness and Computer Intensive methods*, S.Aivazian, Yu. Kharin, H. Rieder, eds., Minsk, Belarusian State University, 157-162.

Owsiński, J.W., Ziółkowski, A. (2007) ProDec – Emergency Procedure Based on Fuzzy Notions for Catchment Management. In: A. Morris, S. Kokhan, eds., *Geographic Uncertainty in Environmental Security*. Springer Verlag, Dordrecht, 271-283.

Owsiński, J. W., Mejza, M. T. (2007) On a New Hybrid Clustering Method for General Purpose Use and Pattern Recognition. In: *Proceedings of the International Multiconference on Computer Scence and Information Technology*, vol. 2, ISSN 1896-7094, http://www.papers2007.imcsit.org/ 121-126, 2007.

Owsiński, J. W., Pielak A. M. (2008) Qualitative assessment of the websites of local authorities in Poland with hierarchical k-histograms. In: *Developments in Fuzzy Sets, Intuitionistic Fuzzy Sets, Generalized Nets and Related Topics. Applications. Vol.* II, K. Atanassov et al., eds. Academic Publishing House EXIT, Warsaw, 185-192.

Owsiński J. W. (2009) Machine-part grouping and cluster analysis: similarities, distances and grouping criteria. *Bulletin of the Polish Academy of Sciences. Technical Sciences*, Special Issue: "*Modeling and optimization of manufacturing systems*", Guest Editors: Z. A. Banaszak, J. Józefczyk, **57**, 3, 217-228.

Owsiński J.W., Brüggemann R., eds. (2008) *Multicriteria Ordering and Ranking: Partial Orders, Ambiguities and Applied Issues*. Systems Research Institute, Polish Academy of Sciences, Warszawa, 270 pp., ISBN 83-894-7521-9.

Owsiński J.W. (2009) Asymmetric distances – a natural case for fuzzy clustering? In: D. A. Viattchenin, ed., *Developments in Fuzzy Clustering*. Vever, Minsk (Belarus'), ISBN 978-985-6215-77-6; 36-45.

Owsiński, J. W., Kacprzyk, J., Shyrai, St., Szmidt, E., Viattchenin, D. A. and Hernandez Hormazabal, J. (2018) A heuristic algorithm of possibilistic clustering with partial supervision for classification of the intuitionistic fuzzy data. *Journal of Multiple-Valued Logic & Soft Computing*, **31** (4).

Owsiński, J. W., Stańczak, J., Zadrożny Sł. (2018) Designing the Municipality Typology for Planning Purposes: The Use of Reverse Clustering and Evolutionary Algorithms. In: P. Daniele and L. Scrimali, eds., *New Trends in Emerging Complex Real Life Problems. ODS , Taormina, Italy, Sept. 10-13, 2018*. AIRO Springer Series, **1**. Springer, Cham. ISBN/EAN 9783030004736 https://doi.org/10.1007/978-3-030-00473-6_33

Owsiński, J. W. (2017) Is There Any 'Law of Requisite Variety' in Construction of Indices for Complex Systems? *Social Indicators Research*, **136**(3), 1125-1137, 13 poz. bibl. DOI: 10.1007/s11205-016-1545-5

Owsiński, J.W. (2020) *Data Analysis in Bi-partial Perspective: Clustering and Beyond*. *Studies in Computational Intelligence* **818**. Springer Nature Switzerland.

II. Modelling and analysis of economies in transition:

Owsinski J.W. and A.Kaluszko (1998) Political and social gradients across space versus cooperation and competition. In: *Competition and Cooperation of the Baltic Regions of Denmark, Germany and Poland*. RCSS, Sopot, 35-58.

Owsinski J.W. and Z. Nahorski (1998) Modelling and analysis of the economies and societies in transition. The MODEST EURO Working Group's perspective. *Management*, Belgrade, III, 9, 18-31.

Owsinski J.W., ed. (1998) *Modelling and Analysing Economies in Transition II*. The Interfaces Institute, Warszawa.

Kisiel-Łowczyc A.B., J.W. Owsinski, Sl.Zadrożny (1999) Trade relation structures in Baltic Europe. *Argumenta Oeconomica*, 2 (8).

Nahorski Z., J.W.Owsinski and T.Szapiro, eds. (2000) *Transition to Advanced Market Institutions & Economies*. Issue of *Annals of Operations Research*, Baltzer, vol. 97.

Owsinski J.W. (2000) An inquiry into the Copernicus-Gresham law of worse money in standardization. *EURAS Yearbook of Standardization. Homo Oeconomicus*, XVII (3), 317-321.

Nahorski Z., Owsiński J.W., Szapiro T., eds. (2007) *The Socio-Economic Transformation. Getting Closer to What?* Palgrave Macmillan, Houndmills – New York, 146+xvii pages, ISBN 978-0-230-00794-9.

Owsiński J.W. (2007) How the System Worked, or: The Herring Barrel Metaphor. In: Z. Nahorski, J.W. Owsiński, T. Szapiro, eds., *The Socio-Economic Transformation. Getting Closer to What?* Palgrave Macmillan, Houndmills – New York, 51-61.

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III. Sustainable development paths:

Owsinski J.W. (1992) Dynamic modelling of biological populations: adaptation versus adaptability. In: *Environmental Management in the Baltic Region. INENCO Proceedings*, No. 1. INENCO, St. Petersburg, 196-211.

Owsinski J.W. (1990) Modelling of commodity populations and their changes: a paradigm and its implementation. In: *Modelling the Innovation*, M.Carnevali, M.Lucertini and S.Nicosia, eds. North Holland, Amsterdam, 471-480.

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Owsinski J. W. (1982) Agriculture, population, environment and balanced regional development: a modelling project in Poland. *Agricultural Systems*, vol. 8, 2, 87-104.

Owsinski J.W., K. Hołubowicz (1986) A case of energy-related development in an agricultural region. In: *Regional Resource Management*, L. Kairiukstis, ed. IIASA, Laxenburg, CP-86-24, 377-396.

Owsinski J.W., Sł. Zadrożny, J. Kacprzyk (1987) Analysis of water use and needs in agriculture through a fuzzy programming model. In: *Optimization Models Using Fuzzy Sets and Possibility Theory*, J, Kacprzyk and S.A. Orlovski, eds. D. Reidel Publ. Co., Dordrecht, 377-395.

Owsiński J.W.: On measurement of sustainability and life quality in Polish municipalities. In: O. Hryniewicz, A. Straszak, J. Studziński, red., *Badania operacyjne i systemowe: środowisko naturalne, przestrzeń, optymalizacja. Badania Systemowe*, **63**. Instytut Badań Systemowych PAN, Warszawa 2008, 185-195.

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IV. e-Government, e-Economy and e-Society

Pielak, A.M., Owsiński, J.W.: The local authority website functionalities: the rural vs. urban image. *Agricultural Economics and Rural Development*, Institute of Agricultural Economics, Bucharest, Romania, IV, 3-4, 2007, 33-42, ISSN 1841-0375.

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V. Logistics and transport

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