

Dr. Dan A. Simovici
Professor of Computer Science
The University of Massachusetts at Boston

Address: University of Massachusetts at Boston, Dept. of Mathematics and Computer Science, Boston, MA 02125

Tel: (617) 287-6472, **e-mail:** dsimcs.umb.edu

Education:

Ph.D., July 1974, University of Bucharest, Romania

M.S. in Mathematics, June 1970, University of Iasi, Romania

M.S. in Electrical Engineering, Polytechnical Institute of Iasi, Romania

Academic Career:

1985 – present Professor of Computer Science, UMB

1984 – present Director of the Computer Science
Graduate Program

1982 – 1985 Associate Professor of Computer Science, UMB

1981 – 1982 Associate Professor, University of Miami

1999 Visiting Professor, Tohoku University, Japan

2006 Visiting Professor, University of Lille, France

2010 Honorary Professor, University “Al. I. Cuza”, Romania

Other Activities

- Managing Editor of *Multiple-Valued Logic - An International Journal*, published by Gordon-Breach.
- General Chairman of the 17th International Symposium for Multiple-Valued Logic, Boston, Massachusetts.
- Chair of the Technical Committee for Multiple-valued Logic of IEEE

RECENT SELECTED PUBLICATIONS

BOOKS

- Mathematical Analysis for Machine Learning and Data Mining, World Scientific, 2018
- Mathematical Tools for Data Mining, Springer-Verlag second edition, 2014
- Linear Algebra Tools for Data Mining, World Scientific, 2012
- Theory of Formal Languages with Applications, World Scientific, 1999 (with Richard Tenney).
- Relational Database Systems, Academic Press, 1995 (with Richard Tenney).
- Mathematical Foundations of Computer Science. vol. I: Sets, Relations, Induction in Computer Science (with Peter Fejer), Springer Verlag, New York, 1990.

JOURNAL and CONFERENCE PUBLICATIONS

- Evaluating Data Minability through Compression - An Experimental Study (with D. Pletea and S. Baraty) - Proceedings of Data Analytics 2012, Barcelona, Spain, September 2012, pp. 97-102 (best paper award)
- Polarities, Axialities, and Marketability, DaWaK 2012, Vienna, September 2012 (with P. Fomenky and W. Kurz), LNCS 7448, Springer-Verlag, pp.243-252
- Approximate Computation of Object Distances by Locally-Sensitive Hashing (with S. Mimaroglu), Proceedings of DBMIN'08, Las Vegas, August 2008
- Metric-Entropy Pairs on Lattices, Journal of Universal Computer Science (Springer-Verlag), vol. 13, no.11, 2007, pp. 1767-1778
- Scalable pattern mining with Bayesian networks, Data Mining and Knowledge Discovery, (Springer-Verlag), (with S. Jaroszewicz and T. Scheffer)
- Detecting Eye Fixations by Projection Clustering (with T. Urruty, S. Lew, N. Ihadaddene) ACM Transactions on Multimedia Computing, Communications and Applications, vol. 3, no.4, December 2007.
- Metric Methods in Data Mining, a chapter in Data Mining Patterns - New Methods and Applications, P. Poncelet, M. Teisseire, F. Masseglia (eds.), Information Science Reference, Hershey, 2007, pp. 1-31.
- Structure Inference of Bayesian Networks from Data: A New Approach Based on Generalized Conditional Entropy (with Saaid Baraty), Proceedings of ECG 2008, Sophia Antipolis, France, Revue des Nouvelles Technologies et de l'Information, RNTI-E-11, 2008, pp. 337-342
- Multisets and Clustering XML Documents (with Swami Iyer) Proceedings of ICTAI, October 2007, Patras, Greece, IEEE CS Press, pp.267-274
- Clustering and Approximate Identification of Frequent Item Sets (with S. Mimaroglu) Proceedings of FLAIRS 2007, Key West, May 2007, pp. 502-506
- Clustering by Random Projections (with T. Urruty and C. Djeraba), ICDM 2007, Leipzig (pdf file), Lecture Notes in Artificial Intelligence, no. 4597, pp. 107-119
- Model detection for User Behavior in Video Sessions (with Sylvain Mongy and Chabane Djeraba), DMIN, June 2007, Las Vegas (pdf file), Proceedings of DMIN 2007, CSREA Press, pp. 99-103
- A New Metric Splitting Criterion for Decision Trees (with Szymon Jaroszewicz) (pdf file) Journal of Parallel, Emerging and Distributed Computing, vol.21, no.4, pp. 239-256, 2006.
- On Feature Extraction through Clustering (with Richard Butterworth and Gregory Piatetsky-Shapiro) (pdf file) Proceedings of ICDM 2005, pp. 581-584 Houston, Texas, November 2005.
- Biclustering of Gene Expression Data Based on Local Nearness (with J. Aguilar-Ruiz and Domingo Savio Rodriguez) (pdf file) Proceedings of EGC 2006, Lille, France, January 2006, pp. 681-692.