CURRICULUM VITAE

Dr. Zeev (Vladimir) Volkovich, Professor

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Work Address: ORT Braude College, Department of Software Engineering
P.O. Box: 78, Karmiel, 21982, Israel
Tel.: 972-4-990-1764, Fax No.: 972-4-990-1852
E-mail: vlvolkov@braude.ac.il
Home Address: Tel.: 972-4-988-5857
6/a/1, Yach-Yam St., Karmiel, P.O. Box 9374, Israel, 21823
Date of Birth: October, 9, 1953
Place of Birth: Uzbekistan (former USSR), Tashkent
Immigrated to Israel: August, 13, 1990
Marital status: Married +2

EDUCATION

Ph.D. 1982,	Probability theory, Institute of Mathematics, Ukrainian Academy of Sciences, Kiev, USSR, Dissertation: "A Description of the Generalized Convolutions and Characterization of Probability Distributions"
M.Sc. 1975,	Mathematics, (summa cum laude), Department of Mathematics, Tashkent State University, Tashkent, USSR, Thesis: "Additive Functions of the Gaussian Field"

ACADEMIC EXPERIENCE

2010 - Present	Head of M.Sc. Program, Department of Software Engineering, ORT Braude College, Israel.
2015- 2018	Head, Department of Software Engineering, ORT Braude College, Israel.
2013- Present	Full Professor, ORT Braude College, Israel
2013	Adjunct Senior Teaching Fellow, Technion, Haifa, Department of Industrial Engineering Israel
2011 - Present	Head of the Data Mining Institute, ORT Braude College, Israel.
2007 – 2012	Head, Department of Software Engineering, ORT Braude College, Israel.
2005 – 2013	Associate Professor, ORT Braude College, Israel.
2001 – 2005	Senior Lecturer, ORT Braude College, Israel.

1991 – 2001	Lecturer, ORT Braude College, Israel.
1997 – 2001	Adjunct Senior Lecturer, Department of Mathematics, Technion, Israel.
1996 – 2007	Adjunct Senior Lecturer, Western Galilee College, Israel.
1988 – 1990	Leading Research Fellow, The Central Asian Regional Research Institute, Tashkent, USSR.
1984 – 1988	Senior Research Fellow, The Central Asian Regional Research Institute, Tashkent, USSR.
1981 – 1984	Senior Research Fellow, Institute of Geology and Exploring of Oil and Gas Deposits, Tashkent, USSR.
1979 – 1981	Adjunct Lecturer, Tashkent Polytechnic University, Tashkent, USSR.
1977 - 1980	Ph.D. Student, Tashkent Polytechnic University, Tashkent, USSR; Leningrad Avionic Hardware University, Leningrad USSR.
1978 – 1979	Senior Research Fellow, Research Institute of Hydrogeology and Engineering Geology, Tashkent, USSR.
1976 – 1977	Research Fellow, Research Institute of Hydrogeology and Engineering Geology, Tashkent, USSR.
1975 – 1976	Research Fellow, Computer Center of the State Planning Committee, Tashkent, USSR.

FURTHER AFFILIATIONS:

2014- Present	Affiliate Full Professor, Institute of Applied, Mathematics (IAM), Middle East Technical University, Ankara, Turkey.
2015- Present	Affiliate Adjunct Full Professor, Department of Mathematics and Statistics, University of Maryland (UMBC), Baltimore, USA.
2004-2006	Affiliate Adjunct Associate Professor, Department of Mathematics and Statistics, University of Maryland (UMBC), Baltimore, USA.

PROFESSIONAL EXPERIENCE

2000 – 2001	Algorithms Expert (part time), Recypher Ltd., Haifa, Israel; Responsibilities: Development and implementation of cryptographic algorithms for data security systems.
1996 – 1999	Director (since 1998) of R&D, Senior Consultant (1996-1998) (part time), Controlled Micro Devices Ltd., Haifa, Israel; Responsibilities: Development and software implementation of numerical modeling algorithms
1995	Senior Consultant (part time), Tamuz Ltd., Haifa, Israel. Responsibilities: Development and software implementation of algorithms for mathematical models of the stock market processes.
1989 – 1990	Supervisor of Mathematical Modeling Department (part time), Technical Center "Grant", Tashkent, USSR; Responsibilities: Software implementation of algorithms for pattern recognition systems.

TEACHING EXPERIENCE

A. ORT Braude College:

Undergraduate Courses:

Computer Science Courses in the Software Engineering Department:
Cryptology 1 (new course)
Cryptology 2 (new course)
Data Compression (new course)
Algorithms Theory (new course)
Discrete Mathematics 1 (new course)
Discrete Mathematics 2 (new course)
Numerical Analysis (new course)
Computer Communication Security (new course)
Data Mining (new course)
Data Mining Lab (new course)
Stochastically Models in Bioinformatics (new course)
Introduction to the Information Theory (new course)

Graduate Courses:

Learning systems (new course at the ORT Braude Software Engineering M.Sc. program)

Other Courses:

Statistics 1 (Software Engineering Department) (new course)
Statistics 2 (Software Engineering Department) (new course)
Statistics 1 (Industrial Engineering and Management Department) (new course)

Statistics 2 (Industrial Engineering and Management Department) (new course)
Statistics 1 (Electrical Engineering Department) (new course)
Statistics 2 (Electrical Engineering Department) (new course)
Numerical Analysis (Electrical Engineering Department) (new course)
Algebra 2 (Computers Engineering Department) (new course)

Development of laboratories and research groups:

- Data Mining Institute, ORT Braude College, Israel.
- Data Security and Data Mining Laboratory of the Software Engineering Department, ORT Braude College, Israel.

B. Other Universities or Colleges

Undergraduate Courses:

- Data Mining Methods (2013) (Technion, Israel)
- Introduction to Probability Theory (1997, 2001) (Technion, Israel)

Graduate Courses:

- Mathematical Statistics and Probability Theory (1978, 1981) (Tashkent Polytechnic University, USSR)
- Differential and Integral Calculus (1978) (Tashkent Polytechnic University, USSR)

ACADEMIC AND PROFESSIONAL AWARDS AND GRANTS

2017 Excellence Prize, ORT Braude College.

2016 Grand "Kamin" Ministry of Science Israel

2016 Excellence Prize, ORT Braude College.

2015 Excellence Prize, ORT Braude College.

2013 Binational Israel – Czech grand in software testing

2010 PATHOSYS- New Algorithms for Host Pathogen Systems Biology, FP7-HEALTH-2010- single-stage grant.

2006 Excellence Prize, ORT Braude College.

2005 Excellence Prize, ORT Braude College.

2004 Excellence Prize, ORT Braude College.

2003 Excellence Prize, ORT Braude College.

1975 Tashkent State University, Summa Cum Laude.

PROFESSIONAL AND PUBLIC ACTIVITIES

ORT Braude College

- 2012-2018, Chair, Teaching Council, Department of Software Engineering.
- 2011-Present, Academic Projects Coordinator at M.Sc. program in the Department of Software Engineering.
- 2010- Present, Member of the development team of the new M.Sc. program in the Department of Software Engineering.
- 2010 – Present, Member of Editorial Board of the International Journal of Lean Thinking.
- 2007 –Present, International collaborator of Eureka Ibero America, Iberian-American Network of Knowledge Discovering, approved by Iberian American Program of Science and Technology for Development (CYTED).
- 2002- Present, Member of the ORT BRAUDE College Academic Council.
- 2002, Chair, Teaching Council, Department of Software Engineering.
- 1993-1997, Member, the College Teaching Council.
- 2001-2004, Academic coordinator of Seminars in Computer Science, Department of Software Engineering.
- 2002-2003, Academic Coordinator in Design of the Data Security and Data Mining Laboratory.

- 2002-2005, Member of the development team of the new B.Sc. Program in the Department of Software Engineering

- 2001-2005, Member of the "Teaching by Internet" Project,
  Developed Courses:
  - Discrete Mathematics 1
  - Cryptography 1

- 1994-1999, Statistical and Software Consultant for the Students and Teachers Survey Committee.
- 1996, Academic Coordinator of the Course "Scientific Programming", Department of Continuing Education.

Conferences Organization

- Member, the Scientific Committee at KES-2018 22nd Annual KES Conference, 3-5 September 2018, Belgrade, Serbia.
- Member, the Scientific Committee at 7th International Conference on Data Science, Technology and Applications (DATA 2018), Jul 26, 2018 - Jul 28, 2018, Porto, Portugal.
- Member, the Scientific Committee at 14th International Conference on Machine Learning and Data Mining MLDM 2018, July 14-19, 2018, New York, USA.
- Member, the Scientific Committee at the 6th International Conference on Data Science, Technology and Applications (DATA) , Madrid, Spain, 26-28 July, 2017.
- Member, the Scientific Committee at International Conference on Big Data Analytics, Data Mining and Computational Intelligence, Lisbon, Portugal, 21 – 23 July 2017
- Member, the Scientific Committee at 9th International KES Conference on Intelligent Decision Technologies, Vila-Moura, Algarve, Portugal 21-23 June 2017.
- Member, the Scientific Committee at 9th International KES Conference on Intelligent Decision Technologies, Puerto de la Cruz, Tenerife, Spain 15-17 June 2016.
- Member, the Scientific Committee at the Sixth International Conference on Advances in Information Mining and Management, Valencia, Spain, May 22 - 26, 2016.
- Member, the Scientific Committee at the Fifth International Conference on Data Analytics, Valencia, Spain, May 22 - 26, 2016.
- Stream Organizer at the 27^{th} EURO Conference on Operational Research, Glasgow, July 2015.
- Member, the Scientific Committee at the 2nd International Workshop on Statistical Methods in Reliability Assessment of Complex Industrial Multi-state

Systems, RAMSS 2014, University of Fribourg, Switzerland, 8th – 12th September 2014.

- Stream Organizer at the 26th EURO Conference on Operational Research, Rome, July 2013.
- Member, the Scientific Committee at IADIS European Conference**,** Data Mining 2013, Prague, Czech Republic**,** July 2013.
- Stream Organizer at the 25th EURO Conference on Operational Research, Vilnius, July, 2012.
- Member, the Scientific Committee at ADIS European Conference Data Mining 2012, Lisbon, Portugal, July 2012.
- Member, the Scientific Committee at Tenth Workshop on Text Mining, Anaheim, USA, April 2012.
- Invited session organizer at the International Federation of Operational Research Societies (IFOR S2011) conference, Melbourne, July 2011.
- Member, the Scientific Committee at Ninth Workshop on Text Mining, Mesa, USA, April 2011.
- Invited stream organizer: 24th European Conference on Operational Research, Lisbon, Portugal, July 2010.
- Member, the Scientific Committee at International Conference on Modeling, Optimization and Dynamics, University of Porto, July 2010.
- Invited organizer of the session "Optimization Approaches in Classification Problems", at Global Conference on Power and Optimization (PCO2010), Golden Coast**,** Queensland**,** Australia, February, 2010.
- Invited organizer of the session "Stochastic Modeling and Simulation II" at the 23rd European Conference on Operational Research, Bonn, July, 2009.
- Invited organizer of the stream" Stochastic Modeling for Classification Problems" at the XIII International Conference Applied Stochastic Models and Data Analysis **(**ASMDA 2009), Vilnius, 2009.
- Member, the International Program Committee at Second Global Conference on Power and Optimization (PCO2009), Bali, Indonesia, 2009.
- Member, the International Program Committee Text Mining workshop at SIAM International Conference on Data Mining, John Ascuaga's Nugget – Sparks, Nevada, 2009.
- Member, the International Program Committee at XXVIII International Seminar on Stability Problems for Stochastic Models, Zakopane, Poland, 2009.
- Member, Program Committee at Continuous Optimization and Knowledge-Based Technologies, Lithuania, 2008.
- Co-Chair of the International Program Committee of XXVI International Seminar Stability Problems for Stochastic Models, Israel, October 22-26, 2007.

- Co-Chair of the Local Organizing Committee of XXVI International Seminar Stability Problems for Stochastic Models, Israel, October 22-26, 2007.
- Chair Program Committee, 2nd ORT Braude College Interdisciplinary Research Conference, Karmiel, Israel, July 11-12, 2006.
- Member, Advisory Committee of the 4th Atlantic Web Intelligence Conference, Ben-Gurion University of the Negev, Beer-Sheva, Israel, June 5-7, 2006.
- Member Program Committee of 4th Atlantic Web Intelligence Conference, Ben-Gurion University of the Negev, Beer-Sheva, Israel, June 5-7, 2006.
- Member, Program Committee, 2nd Workshop on Algorithmic Techniques for Data Mining 2006, Ben-Gurion University of the Negev, Beer-Sheva, Israel, June 5-7, 2006.
- Member, Program Committee, Workshop on Clustering Large High Dimensional Datasets, 1st International Conference on Scalable Information Systems, Hong Kong, May 20-June 1, 2006.
- Member, Program Committee, Joint Israeli-Russian Workshop on Stochastic Models: Theory and Application, ORT Braude College, Karmiel, April 5, 2006.
- Member, Program Committee, Algorithmic Techniques for Data Mining Workshop, ORT Braude College, Karmiel, May, 2005.
- Member, Program Committee, 5th SIAM International Conference on Data Mining (SDM 2005), Workshop on Clustering High Dimensional Data and Its Applications, Newport Beach, CA, USA, April, 2005.
- Member, Program Committee, 4th SIAM International Conference on Data Mining (SDM 2004), Workshop on Clustering High Dimensional Data and its Applications, Lake Buena Vista, FL, USA April, 2004.
- Member, Program Committee, IEEE Data Mining Workshop on Clustering Large Data Sets, Melbourne, FL, USA, November, 2003.
- Member, Program Committee, SIAM International Conference on Data Mining, Workshop on Clustering High Dimensional Data and Its Applications, San Francisco, CA, USA May 2003.

Chairmanship at Conferences

- Section Chair in 12th International Conference, MLDM 2016, New York, USA, July 16-21, 2016.
- Section Chair at the 28th EURO Conference on Operational Research, Glasgow, July 2015.
- Section Chair at KDIR 2012 in Barcelona, October, 2012
- Section Chair at the 25th EURO Conference on Operational Research, Vilnius, July, 2012.
- Section Chair the session “Stochastic Modeling and Simulation II” at the

International Federation of Operational Research Societies (IFOR S2011) Conference, Melbourne, 2011.

- Section Chair the session "Stochastic Modeling and Simulation II" at the 24th European Conference on Operational Research, Lisbon, 2010.
- Section Chair the session "Cluster / Classification" Stochastic Modeling Techniques and Data Analysis International Conference (SMTDA 2010), Chania Crete Greece, 8-11, June 2010.
- Section Chair the session "Stochastic Modeling and Simulation II" at the 23rd European Conference on Operational Research, Bonn, 2009
- Section Chair the session "Stochastic Modeling for Classification Problems", The XIII International Conference Applied Stochastic Models and Data Analysis **(**ASMDA 2009), Vilnius, 2009.
- Section Chair, 20th Mini Conference "Continuous Optimization and Knowledge-Based Technologies", EurOPT, Lithuania, 2008.
- Section Chair, Seminar on Stability Problems for Stochastic Models, ORT Braude College, Israel, October 22-26, 2007.
- Section Chair, 1st European Conference on Data Mining (ECDM'07), Lisbon, Portugal, July 2007.
- Invited Section Chair, 21st European Conference on Operational Research, EURO XXI in Iceland, July, 2006.
- Section Chair, Seminar on Stability Problems for Stochastic Models, Jurmala, Latvia, September 2004.

Referee of papers for publication in the following journals:

- Central European Journal of Operation Research.
- Communications in Statistic.
- Computers and Mathematics with Applications.
- Discrete Applied Mathematics.
- Entrophy
- European Journal of Operational Research.
- Journal of Pattern Recognition Research.
- Journal of Statistical Planning and Inference and SP letters (JSPI).
- IEEE Transactions on Systems, Man and Cybernetics.
- Lithuanian Mathematical Journal.
- Machine learning

- Mathematical Problems in Engineering.
- Meteorology and Atmospheric Physics.
- Optimization.
- Optimization Letters.
- Pattern Recognition.
- Pattern Recognition Letters.
- Statistics and Probability Letters.
- Information Systems
- Knowledge based systems
- Journal of Statistical Computation and Simulation
- PLOS ONE
- Symmetry
- Life

- **LIST OF PUBLICATIONS**

A. Refereed Papers:

1. V. M. Kirzhner , E. V. Ravve, Z. Volkovich, Construction of the developing connecting tree, Engineering Optimization, https://doi.org/10.1080/0305215X.2020.1793978

2. V. M. Kirzhner, D. Toledano-Kitai, Z. Volkovich, Evaluating the Number of Different Genomes in a Metagenome by Means of the Compositional Spectra Approach, bioRxiv, DO - 10.1101/2020.07.23.217364, SP - 2020.07.23.217364

3. L.B Klebanov, Y.V.; Kuvaeva, Z.E. Volkovich, Statistical Indicators of the Scientific Publications Importance: A Stochastic Model and Critical Look. Mathematics, 8, 713, 2020.

4. O. Bernikova, O. Granichin, D. Lemberg, O. Redkin, Z. Volkovich, Z. Entropy-Based Approach for the Detection of Changes in Arabic Newspapers' Content. Entropy, 22, 441. 2020

5. J.K. Misiewicz and Z. Volkovich, Every symmetric weakly-stable random vector is pseudo-isotropic, Journal of Mathematical Analysis and Applications, 483,1.,2020

6. Yu.S. Popkov, Z. Volkovich, A. V. Melnikov, Y. Polishchuk, Methodological Issues of Using the Randomized Machine Learning for Forecasting the Dynamics of Thermokarst Arctic Lakes, Computer Technologies, Automatic Control, Radioelectronics, Bulletin of South Ural State University Online ISSN: 2409-6571

7. V. Kirzhner, Z. Volkovich, R. Avros, and E. Ravve, Testing the Metagenome Composition by the Method of Sequential Set of Primers, Journal of Applied Bioinformatics & Computational Biology, 2018

8. K. Amelin, O. Granichin, N. Kizhaeva, Z. Volkovich, Patterning of writing style evolution by means of dynamic similarity, Pattern Recognition, 77, 45-64, 2018

9. R. Avros, V. Dudka, B. Krena, Z. Letko, H. Pluháčková, S. Ur, T. Vojnar, Z. Volkovich, Boosted decision trees for behavior mining of concurrent programs, Concurrency and Computation Practice and Experience, New York: WILEY, 29(21), 4268-4289. 2017

10. Y. S. Popkov, Z. Volkovich, Y. A. Dubnov, R. Avros and E. Ravve, Entropy "2"-Soft Classification of Objects, Entropy, 19(4), 178, 2017.

11. T. Couronne, V. Kirzner, K. Korenblat and E.V. Ravve and Z. Volkovich: Modelling and analyzing of behavior patterns in cellular networks, International Journal on Advances in Telecommunications, vol 10 no 1 & 2, year 2017, http://www.iariajournals.org/telecommunications/

12. D. Shalymov, O. Granichin, L. Klebanov and Zeev Volkovich, Literary writing style recognition via a minimal spanning tree-based approach, Expert System with Application 61, 1, 145–153, November 2016.

13. Z. Volkovich, O Granichin, O. Redkin and O. Bernikova, Modeling and visualization of media in Arabic, Journal of Informetrics, 10, 2, 439–453, May 2016.

14. D. Lemberg, A. Soffer, and Z. Volkovich, New Approach for Plagiarism Detection, International Journal of Applied Mathematics 29, 3, 365-371, June 2016

15. E. V. Ravve, Z. Volkovich and G.-W. Weber, Automatic Definition of Optimal Default Parameters of Algorithms, Dynamics of Continuous, Discrete and Impulsive Systems, GCAI 2015: 229-251, 2016

16. V. Kizner, E. V. Ravve, Z. Volkovich, and G.-W. Weber, An Estimate of the Objective Function Optimum for the Network Steiner Problem, Annals of Operational Research, March 2016, 238(1), 315-328, 2016.

17. E. V. Ravve, Z. Volkovich and G. Weber, "Automatic Definition of Optimal Default Parameters of Models: Image Matting Application," 2015 17th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC), Timisoara, Romania, 2015, pp. 251-254.

18. E.V. Ravve, Z. Volkovich and G.-W. Weber, Effective optimization with weighted automata on decomposable trees, Optimization: A Journal of Mathematical Programming and Operations Research, 63, 1, 109-127, 2014.

19. N. Levtov, S. Amberkar, Z. Frenkel, L. Kaderali, Z. Volkovich, Detecting Non-Uniform Clusters in Large-Scale Interaction Graphs. J. Comput Biol 21(2), 173-83, 2014.

20. Z. Frenkel, Z. Barzily, Z. Volkovich and E. N. Trifonov, Hidden ancient repeats in DNA: mapping and quantification, GENE, 528, 282-287, 2013.

21. T. Couronné, V. Kirzner, K. Korenblat, Z. Volkovich, Some Features of the Users' Activities in the Mobile Telephone Network. Journal of Pattern Recognition Research, 8, 1, 59-65, 2013.

22. D. Toledano-Kitai, R. Avros, Z. Volkovich, G.- W. Weber and O. Yahalom, A binomial noised model for cluster validation, Journal of Intelligent and Fuzzy Systems, 7, Special, Issue: Recent Advances in Intelligent & Fuzzy Systems, 417-427, 2013.

23. S. Kogan S., Z. Frenkel, O. Kupervasser and Z. Volkovich, Hierarchy of Protein Loop-Lock Structure (HoPLLS): a new server for decomposition of protein structure into a set of closed loops. Journal of Computational Molecular Bioscience (CMB) 3:1-8, 2013.

24. Z. Frenkel, S. Amberkar, L. Kaderali. and Z. Volkovich, Repeated bisections approach for local clustering of PPINs, Journal of Modern Mathematics Frontier, (JMMF), Mar; 2(1), 19-24, 2013.

25. Z. Volkovich, D. Toledano-Kitai and G.-W. Weber, Self-Learning k-Means Clustering: A Global Optimization Approach, Journal of Global Optimization (JOGO), 56 (2), 219-232, 2013.

26. Z. Volkovich, G.-W. Weber, R. Avros, and O. Yahalom, On an adjacency cluster merit approach, Int. J. Operational Research, 13(3), 239–255, 2012.

27. Z. Volkovich, D. Toledano-Kitai, Z. Barzily, G.-W. Weber and R. Avros, A Minimal Spanning Trees Approach to Cluster Stability Problem, Central European Journal of Operation Research, 20(1), 119-139, 2012.

28. E. Trifonov, Z. Volkovich, Z. Frenkel, Multiple levels of meaning in DNA sequences, and one more. Annals of the New York Academy of Sciences. Sep; 1267(1), 35-8, 2012.

29. V. Kirzhner and Z. Volkovich, Model of Overlapping Messages with Degenerate Coding, Applied Mathematics, 3(2), 188-197, 2012.

30. K. Korenblat and Z. Volkovich, Feature Selection for Microarray Data Using Probability Distances, JP Journal of Biostatistics, 7(1), 15 – 34, 2012.

31. K. Korenblat, Z. Volkovich, A. Bolshoy, A., Robust classifying of prokaryotic genomes. Computational Biology and Chemistry, 40, 20-29, 2012.

32. Z. Volkovich, Z. Barzily, G.-W. Weber, D. Toledano-Kitai and R. Avros, Resampling Approach for Cluster Model Selection, Machine Learning, 85(1-2), 209–248, 2011.

33. Z. Frenkel, E. Trifonov, Z. Volkovich and T. Bettecken, Nucleosome Positioning Patterns Derived from Human Apoptotic Nucleosome, Journal of Bimolecular Structure &Dynamics, ISSN 0739-1102, 29(3), 577-583, 2011.

34. E. Kropat, Z.Volkovich and G.-W. Weber, Stochastic Modeling and Simulation" (Stream, XXIV of European Conference on Operational Research), International IFNA-ANS scientific Journal "Problems of nonlinear analysis in engineering systems", 1(35), 17, 137-151, 2011.

35. Z. Volkovich, M. Golani and R. Avros, A comparative approach to cluster validation, Journal of Pattern Recognition Research, 6(2), 230-243, 2011.

36. Z. Volkovich, Z. Barzily, R. Avros and D. Toledano-Kitai, On Application of a Probabilistic K-Nearest Neighbors Model for Cluster Validation Problem, Communications in Statistic, 40, 2997–3010, 2011.

37. Z. Volkovich, M. Golani and R. Avros, On Initialization of the Expectation-Maximization Clustering Algorithm, The Global Journal of Technology and Optimization, Transaction on Evolutionary algorithm and Clustering, ISSN: 2229-8711, Online Publication, 2(2), 117-120, June 2011.

38. O. N. Granichin, D. S. Shalymov, R. Avros and Z. Volkovich, A randomized algorithm for estimating the number of clusters, Automation and Remote Control, 72(4), 754-765, 2011.

39. D. Toledano-Kitai, R. Avros and Z. Volkovich, A Fractal Dimension Standpoint to the Cluster Validation Problem, International Journal of Pure and Applied Mathematics, 20 (2), 187-202, 2011.

40. A. Kaplunovsky, D. Zabrodsky, Z. Volkovich, A. Ivashchenko and A. Bolshoy, Statistics of Exon Lengths in Fungi, The Open Bioinformatics Journal, 4, 31-40, 2010.

41. Z. Volkovich, Z. Barzily, D. Toledano-Kitai and R. Avros, The Hotelling's metric as cluster stability measure, Computer Modeling & New Technologies, 14(4), 65-72, 2010.

42. Z. Volkovich, V. Kirzhner, Z. Barzily, S. Hosid and K. Korenblat, A Linguistic Approach to Classification of Bacterial Genomes, Pattern Recognition, 43(3), 1083-1093, 2010.

43. Z. Volkovich, D. Toledano-Kitai, and R. Avros, On analytical properties of generalized convolutions, Banach Center Publications, Institute of Mathematics, Polish Academy of Sciences Warszawa, (invited paper), 90, 243-274, 2010.

44. P. Soreanu and Z. Volkovich, Energy-Efficient Sensing Models for Wireless Sensor Networks, the International Journal on Advances in Networks and Services, 2(4), 261-272, 2009.

45. P. Soreanu, Z. Volkovich, Z. Barzily and M. Golani, Mitigating jamming attacks in wireless sensor networks: an energy-efficient method in a mobile jammer environment, Journal of Pure and Applied Mathematics, Journal of Pure and Applied Mathematics, 56(4), 533-550, 2009.

46. E. Pancheva, I. Mitov and Z. Volkovich, Relationship between Extremer and Sum Processes Generated By the Same Point Process, Serdica Math. Journal, 2, 2009.

47. Z. Barzily, Z. Volkovich, B. Akteke-Ozturk and G.-W. Weber, On a minimal spanning tree approach in the cluster validation problem, Informatica, 20(2), 187-202, 2009.

48. L. Kozobay-Avraham, S. Hosid, Z. Volkovich and A. Bolshoy, Prokaryote Clustering Based on DNA curvature distributions, The Journal of Combinatorial Algorithms, Informatics and Computational Sciences, 157(10), 2370-2377, 2009.

49. A. Bolshoy, Z. Volkovich, Whole-genome prokaryotic clustering based on gene lengths, Discrete Applied Mathematics, 157(10), 2370-2377, 2009.

50. Z. Volkovich, Z. Barzily, and L. Morozensky, A statistical model of cluster stability, Pattern Recognition, 41(7), 2174-2188, 2008.

51. A. L. Rukhin and Z. Volkovich, Testing Randomness via a periodic Words, the Journal of Statistical Computation and Simulation, 78(12), 1–12, 2008.

52. V. Kirzhner, A. Paz, Z. Volkovich, E. Nevo and A. Korol, Different clustering of genomes across life using the A-T-C-G and degenerate R-Y alphabets: Early and late signaling on genome evolution?, Journal of Molecular Evolution, 64(4), 448-456, 2007.

53. V. Volkovich, J. Kogan and C. Nicholas, Building initial partitions through sampling techniques, European Journal of Operational Research, 183, 3(16), 1097-1105, 2007.

54. E. Pancheva, Z. Volkovich and L. Morozensky, Upper and lower bounds for ruin probability, Pliska Studia Mathematica Bulgarica, 18, 315-326, 2007.

55. A. Grusho, E. Timonina, Z. Volkovich and Z. Barzily, On a probabilistic model of intrusion detection, Journal of Pure and Applied Mathematics, 34(1), 39-50, 2007.

56. E. Pancheva, I. Mitov and Z. Volkovich, Sum and extremal processes over explosion area, Reports of the Bulgarian Academy of Science, 59(12), 1219-1226, 2006.

57. Z. Volkovich, Z. Barzily and P. Soreanu, The Levy-Khinchine representations and functional algebras of test functions, Journal of Pure and Applied Mathematics, 25(1), 103-121, 2005.

58. Z. Volkovich, V. Kirzhner, A. Bolshoy, A. Korol and E. Nevo, The Method of N-grams in large-scale clustering of DNA texts pattern recognition, Pattern Recognition, 38(11), 1902-1912, 2005.

59. V. Kirzhner, A. Bolshoy, Z. Volkovich, A. Korol and E. Nevo, Large scale genome clustering across life based on a linguistic approach. BioSystem, 81(3), 208-222, 2005.

60. M. Elin, D. Shoikhet and V. Volkovich, Semi-groups of holomorphic mappings on the unit disk with a boundary fixed point, Journal of Pure and Applied Mathematics, 12(4), 427-453, 2004.

61. J. Kogan, C. Nicholas and V. Volkovich, Text mining with information-theoretical clustering, Computing in Science and Engineering, 5(6), 52-59, 2003.

62. Ya. I. Belopolskaya, L. B. Klebanov and V. E. Volkovich, Characterization of Elliptic Distributions, Zap. Nauchn. Sem. S.-Peterburg. Otdel. Mat. Inst. Steklov. (POMI) 294 (2002), Veroyatn. i Stat. 5, 19-28, 260; Translation in Journal of Mathematical Sciences, 1, 1682-1686, 2005.

63. L. Klebanov, T. Kozubowskii, S. Rachev and V. Volkovich, Characterization of distributions symmetric with respect to a group of transformations and testing of corresponding statistical hypothesis, Statistics and Probability Letters, 53, 241-247, 2001.

64. L. Klebanov, S. Mittnik, S. T. Rachev and V. Volkovich, A new representation for the characteristic function of strictly geo-stable vectors, Journal of Applied Probability, 37(4), 1137-1142, 2000.

65. V. Volkovich, On V-infinitely divisible distributions, Theory of Probabilities and Its Applications, 3, 98-111, 1995.

66. V. Volkovich, On symmetric stochastic convolutions, Journal of Theoretical Probability, 5(3), 417-430, 1992.

67. V. Volkovich, On centering of probabilities distributions, Izvestya of the Academy of Sciences of the Uzbek SSR, Physical-mathematical Series, 2, 3-9, 1990.

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69. V. Volkovich, On condition of equal distributive of linear forms with unitary coefficients, Izvestya of the Academy of Sciences of the Uzbek SSR, Physical-mathematical Series, 5, 23-28, 1980.

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