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**Education**

INSTITUTE OF MATHEMATICS  
SIBERIAN BRANCH  
SOVIET ACADEMY OF SCIENCES  
Ph.D. in Mathematics May 1979.

Novosibirsk, Russia

LENINGRAD UNIVERSITY  
M.S. in Mathematics and B.S. in Computer Science  
December 1974. Diploma summa cum laude.

St. Petersburg, Russia

**Experience**

UNIVERSITY OF TEXAS AT EL PASO  
1997-present  
Professor.

El Paso, TX

UNIVERSITY OF TEXAS AT EL PASO  
1990-1997  
Associate Professor.

El Paso, TX

CHIANG MAI UNIVERSITY  
2009-present  
Adjunct Professor

Chiang Mai, Thailand

CENTER FOR COMPUTATIONAL SCIENCES  
AND ADVANCED DISTRIBUTED SIMULATION  
2001-present  
Research Associate

Houston, TX

LEIBNIZ UNIVERSITY OF HANNOVER  
May-June 2017  
Merkator Fellow

Hannover, Germany

UNIVERSITY OF OSTRAVA  
July-August 2011  
Visiting Professor

Ostrava, Czech Republic

UNIVERSITY OF OSTRAVA  
May-June 2009

Ostrava, Czech Republic

Visiting Researcher  
TECHNION  
ISRAEL INSTITUTE OF TECHNOLOGY  
March 2009  
Haifa, Israel

Visiting Researcher  
KING MONGKUT'S UNIVERSITY  
OF TECHNOLOGY NORTH BANGKOK  
December 2008–January 2009  
Bangkok, Thailand

Visiting Professor  
MAX PLANCK INSTITUT FÜR MATHEMATIK  
May – June 2007  
Bonn, Germany

Visiting Researcher  
JAPAN ADVANCED INSTITUTE OF SCIENCE  
AND TECHNOLOGY  
March 2007  
Ishikawa, Japan

Visiting Researcher  
UNIVERSITY OF TEXAS AT AUSTIN  
February – March 2006  
Austin, Texas

Visiting Researcher  
CATHOLIC UNIVERSITY OF PELOTAS  
December 2003–January 2004  
Pelotas, Brazil

Visiting Professor  
EULER INTERNATIONAL MATHEMATICAL  
INSTITUTE  
August 2002  
St. Petersburg, Russia

Visiting Researcher  
FIELDS INSTITUTE FOR RESEARCH  
IN MATHEMATICAL SCIENCES  
May 2002  
Toronto, Canada

Visiting Faculty Member  
CHINESE UNIVERSITY OF HONG KONG  
December 1998–January 1999  
Hong Kong, China

Academic Visitor  
INSTITUTE FOR MATHEMATICS  
AND ITS APPLICATIONS  
August 1996  
Minneapolis, MN

Visiting Researcher  
UNIVERSITY OF PARIS VI  
Summer 1996  
Paris, France

Invited Professor  
Laforia, Laboratory of Forms and Artificial Intelligence

STANFORD UNIVERSITY  
1989

Stanford, CA

Visiting Scholar  
Computer Science Department and  
Institute for Mathematical Studies  
in the Social Sciences.

NATIONAL RESEARCH INSTITUTE FOR  
ELECTRICAL MEASURING INSTRUMENTS  
1986–1989

St. Petersburg, Russia

Leading Research Associate

CENTER FOR NEW INFORMATIONAL  
TECHNOLOGY "INFORMATIKA"  
1988–1989

St. Petersburg, Russia

Senior Research Associate

LENINGRAD UNIVERSITY  
1988–1989

St. Petersburg, Russia

Lecturer, Special Mathematical College

ACADEMY OF SCIENCES  
NATIONAL COUNCIL ON CYBERNETICS  
AND ARTIFICIAL INTELLIGENCE  
1985–1989

Moscow, Russia

Research Associate  
Committee on Applications of Mathematical Logic

LENINGRAD ELECTRICAL ENGINEERING  
INSTITUTE  
1985–1989

St. Petersburg, Russia

Lecturer, Department of Mathematical Logic

NATIONAL RESEARCH INSTITUTE FOR  
ELECTRICAL MEASURING INSTRUMENTS  
1983–1986

St. Petersburg, Russia

Senior Research Associate

NATIONAL RESEARCH INSTITUTE FOR  
ELECTRICAL MEASURING INSTRUMENTS  
1980–1983

St. Petersburg, Russia

Research Associate

EXPERIMENTAL COLLEGE OF  
INTENSIVE EDUCATION  
LABORATORY OF EXPERIMENTAL

St. Petersburg, Russia

PSYCHOLOGICAL SYSTEMS

1980–1983

Professor

SOVIET SPACE SHUTTLE PROGRAM  
NATIONAL INSTITUTE OF SCIENTIFIC  
INSTRUMENTS

St. Petersburg, Russia

1982

Senior Research Associate

LENINGRAD PEDAGOGICAL INSTITUTE  
1981

St. Petersburg, Russia

Lecturer, Mathematical Department

SPECIAL ASTROPHYSICAL OBSERVATORY  
1978–1980

St. Petersburg, Russia

Senior Research Associate

INSTITUTE OF MATHEMATICS  
1975–1978

Novosibirsk, Russia

Research Associate

NOVOSIBIRSK UNIVERSITY  
1975–1976

Novosibirsk, Russia

Lecturer, Mathematics Department

NOVOSIBIRSK ELECTRICAL ENGINEERING  
INSTITUTE  
1975–1976

Novosibirsk, Russia

Research Associate

LENINGRAD UNIVERSITY  
1973–1974

St. Petersburg, Russia

Director, Honors Program, Mathematics Department

LENINGRAD UNIVERSITY  
1970–1973

St. Petersburg, Russia

Lecturer, Honors Program

Mathematics and Astronomy Department

ACADEMY OF SCIENCES, KOMI BRANCH  
1973

Syktvykar, Russia

Research Associate

Department of Mathematics and Computer Science

## Research Activities

More than 1,400 research publications in books, journals, and peer-refereed conference proceedings; this number includes more than 550 publications with student co-authors.

### Research Books

Andrzej Pownuk and Vladik Kreinovich, *Combining Interval, Probabilistic, and Other Types of Uncertainty in Engineering Applications*, Springer Verlag, Cham, Switzerland, 2018.

L. Octavio Lerma and Vladik Kreinovich, *Towards Analytical Techniques for Optimizing Knowledge Acquisition, Processing, Propagation, and Use in Cyberinfrastructure and Big Data Applications*, Springer Verlag, Cham, Switzerland, 2018.

Joe Lorkowski and Vladik Kreinovich, *Bounded Rationality in Decision Making Under Uncertainty: Towards Optimal Granularity*, Springer Verlag, Cham, Switzerland, 2018.

Christian Servin and Vladik Kreinovich, *Propagation of Interval and Probabilistic Uncertainty in Cyberinfrastructure-Related Data Processing and Data Fusion*, Springer Verlag, Berlin, Heidelberg, 2015.

Jaime Nava and Vladik Kreinovich, *Algorithmic Aspects of Analysis, Prediction, and Control in Science and Engineering: An Approach Based on Symmetry and Similarity*, Springer Verlag, Berlin, Heidelberg, 2015.

Hung T. Nguyen, Vladik Kreinovich, Berlin Wu, and Gang Xiang, *Computing Statistics under Interval and Fuzzy Uncertainty*, Springer Verlag, Berlin, Heidelberg, 2012.

Shoumei Li, Yukio Ogura, and Vladik Kreinovich, *Limit Theorems and Applications of Set Valued and Fuzzy Valued Random Variables*, Kluwer Academic Publishers, Dordrecht, 2002.

Vladik Kreinovich, Anatoly Lakeyev, Jiří Rohn, and Patrick Kahl, *Computational complexity and feasibility of data processing and interval computations*, Kluwer, Dordrecht, 1998.

Hung T. Nguyen and Vladik Kreinovich, *Applications of continuous mathematics to computer science*, Kluwer, Dordrecht, 1997.

### Edited Research Books

Hung T. Nguyen and Vladik Kreinovich (eds.), *Algebraic Techniques and Their Use in Describing and Processing Uncertainty*, Springer Verlag, Cham, Switzerland, to appear.

Ralph Baker Kearfott, Ildar Batyrshin, Marek Reformat, Martine Ceberio, and Vladik Kreinovich (eds.), *Fuzzy Techniques: Theory and Applications*, Springer Verlag, Cham, Switzerland, 2019.

Olga Dolinina, Alexander Brovko, Vitaly Pechenkin, Alexey Lvov, Vadim Zhud, and Vladik Kreinovich (eds.), *Recent Research in Control Engineering and Decision Making*, Springer Verlag, Cham, Switzerland, 2019.

Vladik Kreinovich and Songsak Sriboonchitta (eds.), *Structural Changes and Their Econometric Modeling*, Springer Verlag, Cham, Switzerland, 2019.

Vladik Kreinovich, Nguyen Ngoc Thach, Nguyen Duc Trung, and Dang Van Thanh (eds.), *Beyond Traditional Probabilistic Methods in Economics*, Springer, Cham, Switzerland, 2019.

Lotfi Zadeh, Ronald R. Yager, Shahnaz N. Shahbazova, Marek Reformat, and Vladik Kreinovich (eds.), *Recent Developments and New Direction in Soft Computing: Foundations and Applications*, Springer Verlag, Cham, Switzerland, 2018.

Oleg Chertov, Tymofiy Mylovanov, Yuriy Kondratenko, Janusz Kacprzyk, Vladik Kreinovich, and Vadim Stefanuk (eds.), *Recent Developments in Data Science and Intelligent Analysis of Information*, Springer Verlag, Cham, Switzerland, 2018.

Ly H. Anh, Le Si Dong, Vladik Kreinovich, and Nguyen Ngoc Thach (eds.), *Econometrics for Financial Applications*, Springer Verlag, Cham, Switzerland, 2018.

Vladik Kreinovich, Songsak Sriboonchitta, and Nopasit Chakpitak (Eds.), *Predictive Econometrics and Big Data*, Springer Verlag, Cham, Switzerland, 2018.

Martine Ceberio and Vladik Kreinovich (eds.), *Constraint Programming and Decision Making: Theory and Applications*, Springer Verlag, Berlin, Heidelberg, 2018.

Vladik Kreinovich (ed.), *Uncertainty Modeling*, Springer Verlag, Cham, Switzerland, 2017.

Vladik Kreinovich, Songsak Sriboonchitta, and Van Nam Huynh (eds.), *Robustness in Econometrics*, Springer Verlag, Cham, Switzerland, 2017.

Van Nam Huynh, Vladik Kreinovich, and Songsak Sriboonchitta (eds.), *Causal Inference in Econometrics*, Springer Verlag, Cham, Switzerland, 2016.

Van-Nam Huynh, Vladik Kreinovich, Songsak Sriboonchitta, and Komsan Suriya (eds.), *Econometrics of Risk*, Springer Verlag, Berlin, Heidelberg, 2015.

Martine Ceberio and Vladik Kreinovich (eds.), *Constraint Programming and Decision Making*, Springer Verlag, Berlin, Heidelberg, 2014.

Van-Nam Huynh, Vladik Kreinovich, and Songsak Sriboonchitta (eds.), *Modeling Dependence in Econometrics*, Springer Verlag, Berlin, Heidelberg, 2014.

Mo Jamshidi, Vladik Kreinovich, and Janusz Kacprzyk (eds.), *Advance Trends in Soft Computing*, Springer Verlag, Berlin, Heidelberg, 2013.

Van-Nam Huynh, Vladik Kreinovich, Songsak Sriboonchitta, and Komsan Suriya (eds.), *Uncertainty Analysis in Econometrics, with Applications*, Springer Verlag, Berlin, Heidelberg, 2013.

Chenyi Hu, R. Baker Kearfott, Andre de Korvin, and Vladik Kreinovich (eds.), *Knowledge Processing with Interval and Soft Computing*, Springer Verlag, London, 2008.

Witold Pedrycz, Andrzej Skowron, and Vladik Kreinovich (eds.), *Handbook on Granular Computing*, Wiley, Chichester, UK, 2008.

Van-Nam Huynh, Yoshiteru Nakamori, Hiroakira Ono, Jonathan Lawry, Vladik Kreinovich, and Hung T. Nguyen (eds.), *Interval/Probabilistic Uncertainty and Non-Classical Logics*, Springer-Verlag, Berlin-Heidelberg-New York, 2008.

L. Reznik and V. Kreinovich (eds.), *Soft Computing in Measurements and Information Acquisition*, Springer-Verlag, Berlin-Heidelberg, 2003.

Vladik Kreinovich and Grigory Mints (eds.), *Problems of reducing the exhaustive search*, American Mathematical Society (AMS Translations — Series 2, Vol. 178), Providence, RI, 1997.

R. Baker Kearfott and Vladik Kreinovich (eds.), *Applications of Interval Computations*, Kluwer, Dordrecht, 1996.

### **Collaboration in Edited Research Books**

Solomon Feferman and Wilfried Sieg (eds.), with the collaboration of Vladik Kreinovich, Vladimir Lifschitz, and Ruy de Queiroz, *Proofs, Categories and Computations: Essays in honor of Grigori Mints*, College Publications, London, UK, 2010.

### **Research Book Chapters**

Vladik Kreinovich and Olga Kosheleva, “Which fuzzy logic operations are most appropriate for ontological semantics: theoretical explanation of empirical observations”, In: Salvatore Attardo (ed.), *Script-Based Semantics: Foundations and Applications*, De Gruyter Mouton, Berlin, to appear.

Olga Kosheleva, Vladik Kreinovich, and Thongchai Dumrongpokaphan, “A Symmetry-Based Explanation of the Main Idea Behind Chubanov’s Linear Programming Algorithm”, In: Hung T. Nguyen and Vladik Kreinovich (eds.), *Algebraic Techniques and Their Use in Describing and Processing Uncertainty*, Springer, Cham, Switzerland, to appear.

Vladik Kreinovich, Olga Kosheleva, and Songsak Sriboonchitta, “Why Bohmian Approach to Quantum Econometrics: An Algebraic Explanation”, In: Hung T. Nguyen and Vladik Kreinovich (eds.), *Algebraic Techniques and Their Use in Describing and Processing Uncertainty*, Springer, Cham, Switzerland, to appear.

Vladik Kreinovich, Olga Kosheleva, and Michael Zakharevich, “Z-Numbers: How They Describe Student Confidence and How They Can Explain (and Improve) Laplacian and Schroedinger Eigenmap Dimension Reduction in Data Analysis”, In: Christophe Marsala and Marie-Jeanne Lesot (eds.), *A Fuzzy Dictionary of Fuzzy Modelling: Common Concepts and Perspectives*, Springer, Cham, Switzerland, to appear.

Songsak Sriboonchitta, Olga Kosheleva, and Vladik Kreinovich, “Beyond Integration: A Symmetry-Based Approach to Reaching Stationarity in Economic Time Series”, In: Olga Kosheleva, Sergey Shary, Gang Xiang, and Roman Zapatrin (eds.), *Beyond Traditional Probabilistic Data Processing Techniques: Interval, Fuzzy, etc. Methods and Their Applications*, Springer, Cham, Switzerland, 2019, to appear.

Thongchai Dumrongpokaphan, Olga Kosheleva, Vladik Kreinovich, and Aleksandra Belina, “Why Sparse?”, In: Olga Kosheleva, Sergey Shary, Gang Xiang, and Roman Zapatrin (eds.), *Beyond Traditional Probabilistic Data Processing Techniques: Interval, Fuzzy, etc. Methods and Their Applications*, Springer, Cham, Switzerland, 2019, to appear.

Vladik Kreinovich, “Symmetries Are Important”, In: Olga Kosheleva, Sergey Shary, Gang Xiang, and Roman Zapatrin (eds.), *Beyond Traditional Probabilistic Data Processing Techniques: Interval, Fuzzy, etc. Methods and Their Applications*, Springer, Cham, Switzerland, 2019, to appear.

Olac Fuentes, Justin Parra, Elizabeth Anthony, and Vladik Kreinovich, “Why Rectified Linear Neurons Are Efficient: A Possible Theoretical Explanations”, In: Olga Kosheleva, Sergey Shary, Gang Xiang, and Roman Zapatrin (eds.), *Beyond Traditional Probabilistic Data Processing Techniques: Interval, Fuzzy, etc. Methods and Their Applications*, Springer, Cham, Switzerland, 2019, to appear.

Andrzej Pownuk, Vladik Kreinovich, Songsak Sriboonchitta, “Fuzzy Data Processing Beyond Min t-Norm”, In: Christian Berger-Vachon, Ana Mara Gil Lafuente, Janusz Kacprzyk, Yuriy Kondratenko, José M. Merigo Lindahl, and Carlo Morabito (eds.), *Complex Systems: Solutions and Challenges in Economics, Management, and Engineering*, Springer Verlag, to appear.

Vladik Kreinovich, Luc Longpre, and Adriana Beltran, “QFT + NP = P: Quantum Field Theory (QFT) – a possible way of solving NP-complete problems in polynomial time”, In: Aboul Ella Hassanien, Mohamed Elhoseny, Ahmed Farouk, and Janusz Kacprzyk (eds.), *Quantum Computing: an Environment for Intelligent Large Scale Real Application*, Springer Verlag, to appear.

Andrzej Pownuk and Vladik Kreinovich, “(Hypothetical) negative probabilities can speed up uncertainty propagation algorithms”, In: Aboul Ella Hassanien, Mohamed Elhoseny, Ahmed Farouk, and Janusz Kacprzyk (eds.), *Quantum Computing: an Environment for Intelligent Large Scale Real Application*, Springer Verlag, to appear.

Tran Anh Tuan, Vladik Kreinovich, and Thach Ngoc Nguyen, “Decision Making Under Interval Uncertainty: Beyond Hurwicz Pessimism-Optimism Criterion”, In:



Vladik Kreinovich, Nguyen Ngoc Thach, Nguyen Duc Trung, and Dang Van Thanh (eds.), *Beyond Traditional Probabilistic Methods in Economics*, Springer, Cham, Switzerland, 2019, pp. 176–184.

Thongchai Dumrongpokaphan, Vladik Kreinovich, and Songsak Sriboonchitta, “Why Threshold Models: A Theoretical Explanation”, In: Vladik Kreinovich, Nguyen Ngoc Thach, Nguyen Duc Trung, and Dang Van Thanh (eds.), *Beyond Traditional Probabilistic Methods in Economics*, Springer, Cham, Switzerland, 2019, pp. 137–145.

Thongchai Dumrongpokaphan, Afshin Gholamy, Vladik Kreinovich, and Hoang Phuong Nguyen, “Why Hammerstein-Type Block Models Are So Efficient: Case Study of Financial Econometrics”, In: Vladik Kreinovich, Nguyen Ngoc Thach, Nguyen Duc Trung, and Dang Van Thanh (eds.), *Beyond Traditional Probabilistic Methods in Economics*, Springer, Cham, Switzerland, 2019, pp. 129–136.

Miroslav Svítek, Olga Kosheleva, Vladik Kreinovich, and Thach Ngoc Nguyen, “Why Quantum (Wave Probability) Models Are a Good Description of Many Non-Quantum Complex Systems, and How to Go Beyond Quantum Models”, In: Vladik Kreinovich, Nguyen Ngoc Thach, Nguyen Duc Trung, and Dang Van Thanh (eds.), *Beyond Traditional Probabilistic Methods in Economics*, Springer, Cham, Switzerland, 2019, pp. 168–175.

Thach Ngoc Nguyen, Olga Kosheleva, Vladik Kreinovich, and Hoang Phuong Nguyen, “Blockchains Beyond Bitcoin: Towards Optimal Level of Decentralization in Storing Financial Data”, In: Vladik Kreinovich, Nguyen Ngoc Thach, Nguyen Duc Trung, and Dang Van Thanh (eds.), *Beyond Traditional Probabilistic Methods in Economics*, Springer, Cham, Switzerland, 2019, pp. 163–167.

Edgar Daniel Rodriguez Velasquez, Carlos M. Chang Albitres, Thach Ngoc Nguyen, Olga Kosheleva, and Vladik Kreinovich, “How to Take Expert Uncertainty into Account: Economic Approach Illustrated by Pavement Engineering Applications”, In: Vladik Kreinovich and Songsak Sriboonchitta (eds.), *Structural Changes and Their Econometric Modeling*, Springer Verlag, Cham, Switzerland, 2019, pp. 182–190.

Songsak Sriboonchitta, Luc Longpré, Vladik Kreinovich, and Thongchai Dumrongpokaphan, “Why the Best Predictive Models Are Often Different from the Best Explanatory Models: A Theoretical Explanation”, In: Vladik Kreinovich and Songsak Sriboonchitta (eds.), *Structural Changes and Their Econometric Modeling*, Springer Verlag, Cham, Switzerland, 2019, pp. 163–171.

Songsak Sriboonchitta, Hung T. Nguyen, Olga Kosheleva, Vladik Kreinovich, and Thach Ngoc Nguyen, “Quantum Approach Explains the Need for Expert Knowledge: On the Example of Econometrics”, In: Vladik Kreinovich and Songsak Sriboonchitta (eds.), *Structural Changes and Their Econometric Modeling*, Springer Verlag, Cham, Switzerland, 2019, pp. 191–199.

Thach Ngoc Nguyen, Olga Kosheleva, Vladik Kreinovich, and Hoang Phuong Nguyen, “Algorithmic Need for Subcopulas”, In: Vladik Kreinovich and

Songsak Sriboonchitta (eds.), *Structural Changes and Their Econometric Modeling*, Springer Verlag, Cham, Switzerland, 2019, pp. 172–181.

Afshin Gholamy, Justin Parra, Vladik Kreinovich, Olac Fuentes, and Elizabeth Anthony, “How to Best Apply Deep Neural Networks in Geosciences: Towards Optimal “Averaging” in Dropout Training”, In: Junzo Watada, Shing Chieng Tan, Pandian Vasant, Eswaran Padmanabhan, and Lakhmi C. Jain (eds.), *Smart Unconventional Modelling, Simulation and Optimization for Geosciences and Petroleum Engineering*, Springer Verlag, 2019, pp. 15–26.

Nicolas Madrid, Irina Perfilieva, and Vladik Kreinovich, “How to Describe Measurement Uncertainty and Uncertainty of Expert Estimates?”, In: Lotfi Zadeh, Ronald R. Yager, Shahnaz N. Shahbazova, Marek Reformat, and Vladik Kreinovich (eds.), *Recent Developments and New Direction in Soft Computing: Foundations and Applications*, Springer Verlag, Cham, Switzerland, 2018, pp. 247–258.

Fernando Cervantes, Brian Usevitch, Leobardo Valera, and Vladik Kreinovich, “Why Sparse? Fuzzy Techniques Explain Empirical Efficiency of Sparsity-Based Data- and Image-Processing Algorithms”, In: Lotfi Zadeh, Ronald R. Yager, Shahnaz N. Shahbazova, Marek Reformat, and Vladik Kreinovich (eds.), *Recent Developments and New Direction in Soft Computing: Foundations and Applications*, Springer Verlag, Cham, Switzerland, 2018, pp. 419–430.

Vladik Kreinovich, Olga Kosheleva, and Thongchai Dumrongpokaphan, “Beyond traditional applications of fuzzy techniques: main idea and case studies”, In: Lotfi Zadeh, Ronald R. Yager, Shahnaz N. Sahbazova, Marek Reformat, and Vladik Kreinovich (eds.), *Recent Developments and New Direction in Soft Computing: Foundations and Applications*, Springer Verlag, Cham, Switzerland, 2018, pp. 465–482.

Olga Kosheleva, and Vladik Kreinovich, and Laecio Carvalho Barros, “Chemical Kinetics in Situations Intermediate Between Usual and High Concentrations: Fuzzy-Motivated Derivation of the Formulas”, In: Lotfi Zadeh, Ronald R. Yager, Shahnaz N. Sahbazova, Marek Reformat, and Vladik Kreinovich (eds.), *Recent Developments and New Direction in Soft Computing: Foundations and Applications*, Springer Verlag, Cham, Switzerland, 2018, pp. 525–536.

Pedro Barragan, Soheil Nazarian, Vladik Kreinovich, Afshin Gholamy, and Mehran Mazari, “How to Estimate Resilient Modulus for Unbound Aggregate Materials: A Theoretical Explanation of an Empirical Formula”, In: Lotfi Zadeh, Ronald R. Yager, Shahnaz N. Shahbazova, Marek Reformat, and Vladik Kreinovich (eds.), *Recent Developments and New Direction in Soft Computing: Foundations and Applications*, Springer Verlag, Cham, Switzerland, 2018, pp. 571–580.

Stephen M. Escarzaga, Craig Tweedie, Olga Kosheleva, and Vladik Kreinovich, “How to Predict Nesting Sites and How to Measure Shoreline Erosion: Fuzzy and Probabilistic Techniques for Environment-Related Spatial Data Processing”, In: Lotfi Zadeh, Ronald R. Yager, Shahnaz N. Shahbazova, Marek Reformat, and Vladik Kreinovich (eds.), *Recent Developments and New Direction in Soft Computing: Foundations and Applications*, Springer Verlag, Cham, Switzerland, 2018,

pp. 595–604.

Michael Beer, Zitong Gong, Ingo Neumann, Songsak Sriboonchitta, and Vladik Kreinovich, “What If We Do Not Know Correlations?”, In: Ly H. Anh, Le Si Dong, Vladik Kreinovich, and Nguyen Ngoc Thach (eds.), *Econometrics for Financial Applications*, Springer Verlag, Cham, Switzerland, 2018, pp. 78–85.

Stephen Schön, Gael Kermarrec, Boris Kargoll, Ingo Neumann, Olga Kosheleva, and Vladik Kreinovich, “Why Student Distributions? Why Matern’s Covariance Model? A Symmetry-Based Explanation”, In: Ly H. Anh, Le Si Dong, Vladik Kreinovich, and Nguyen Ngoc Thach (eds.), *Econometrics for Financial Applications*, Springer Verlag, Cham, Switzerland, 2018, pp. 266–275.

Thongchai Dumrongpokaphan and Vladik Kreinovich, “Markowitz Portfolio Theory Helps Decrease Medicines’ Side Effect and Speed Up Machine Learning”, In: Ly H. Anh, Le Si Dong, Vladik Kreinovich, and Nguyen Ngoc Thach (eds.), *Econometrics for Financial Applications*, Springer Verlag, Cham, Switzerland, 2018, pp. 86–93.

Vladik Kreinovich, Hung T. Nguyen, and Songsak Sriboonchitta, “Quantum Ideas in Economics Beyond Quantum Econometrics”, In: Ly H. Anh, Le Si Dong, Vladik Kreinovich, and Nguyen Ngoc Thach (eds.), *Econometrics for Financial Applications*, Springer Verlag, Cham, Switzerland, 2018, pp. 146–151.

Anh H. Ly, Michael Zakharevich, Olga Kosheleva, and Vladik Kreinovich, “Ancient Bankruptcy Solution Makes Economic Sense”, In: Ly H. Anh, Le Si Dong, Vladik Kreinovich, and Nguyen Ngoc Thach (eds.), *Econometrics for Financial Applications*, Springer Verlag, Cham, Switzerland, 2018, pp. 152–160.

Thach N. Nguyen, Olga Kosheleva, and Vladik Kreinovich, “Maximum Entropy Beyond Selecting Probability Distributions”, In: Ly H. Anh, Le Si Dong, Vladik Kreinovich, and Nguyen Ngoc Thach (eds.), *Econometrics for Financial Applications*, Springer Verlag, Cham, Switzerland, 2018, pp. 186–195.

Martha Osegueda Escobar, Vladik Kreinovich, and Thach N. Nguyen, “Is It Legitimate Statistics or Is It Sexism: Why Discrimination Is Not Rational”, In: Ly H. Anh, Le Si Dong, Vladik Kreinovich, and Nguyen Ngoc Thach (eds.), *Econometrics for Financial Applications*, Springer Verlag, Cham, Switzerland, 2018, pp. 235–242.

Vladik Kreinovich, Anh H. Ly, Olga Kosheleva, and Songsak Sriboonchitta, “Efficient Parameter-Estimating Algorithms for Symmetry-Motivated Models: Econometrics and Beyond”, In: Ly H. Anh, Le Si Dong, Vladik Kreinovich, and Nguyen Ngoc Thach (eds.), *Econometrics for Financial Applications*, Springer Verlag, Cham, Switzerland, 2018, pp. 134–145.

Vladik Kreinovich, Hung T. Nguyen, Songsak Sriboonchitta, and Olga Kosheleva, “How Better Are Predictive Models: Analysis on the Practically Important Example of Robust Interval Uncertainty”, In: Vladik Kreinovich, Songsak Sriboonchitta, and Nopasit Chakpitak (Eds.), *Predictive Econometrics and Big Data*, Springer Verlag, Cham, Switzerland, 2018, pp. 205–213.

Vladik Kreinovich, Thongchai Dumrongpokaphan, Hung T. Nguyen, and Olga Kosheleva, “How to Gauge Accuracy of Processing Big Data: Teaching Machine Learning Techniques to Gauge Their Own Accuracy”, In: Vladik Kreinovich, Songsak Sriboonchitta, and Nopasit Chakpitak (Eds.), *Predictive Econometrics and Big Data*, Springer Verlag, Cham, Switzerland, 2018, pp. 198–204.

Thongchai Dumrongpokaphan and Vladik Kreinovich, “Kuznets Curve: A Simple Dynamical System-Based Explanation”, In: Vladik Kreinovich, Songsak Sriboonchitta, and Nopasit Chakpitak (Eds.), *Predictive Econometrics and Big Data*, Springer Verlag, Cham, Switzerland, 2018, pp. 177–181.

Vladik Kreinovich and Thongchai Dumrongpokaphan, “How to Estimate Statistical Characteristics Based on a Sample: Nonparametric Maximum Likelihood Approach Leads to Sample Mean, Sample Variance, etc.”, In: Vladik Kreinovich, Songsak Sriboonchitta, and Nopasit Chakpitak (Eds.), *Predictive Econometrics and Big Data*, Springer Verlag, Cham, Switzerland, 2018, pp. 192–197.

Vladik Kreinovich and Songsak Sriboonchitta, “Quantitative Justification for the Gravity Model in Economics”, In: Vladik Kreinovich, Songsak Sriboonchitta, and Nopasit Chakpitak (Eds.), *Predictive Econometrics and Big Data*, Springer Verlag, Cham, Switzerland, 2018, pp. 214–221.

Songsak Sriboonchitta and Vladik Kreinovich, “A Bad Plan Is Better Than No Plan: A Theoretical Justification of an Empirical Observation”, In: Vladik Kreinovich, Songsak Sriboonchitta, and Nopasit Chakpitak (Eds.), *Predictive Econometrics and Big Data*, Springer Verlag, Cham, Switzerland, 2018, pp. 266–272.

Vladik Kreinovich and Thongchai Dumrongpokaphan, “Optimal Group Decision Making Criterion and How It Can Help to Decrease Poverty, Inequality, and Discrimination”, In: Mikael Collan and Janusz Kacprzyk (editors), *Soft Computing Applications for Group Decision Making and Consensus Modeling*, Springer Verlag, 2018, pp. 3–19.

Martine Ceberio, Olga Kosheleva, and Vladik Kreinovich, “Optimizing  $\text{pred}(25)$  Is NP-Hard”, In: Martine Ceberio and Vladik Kreinovich (eds.), *Constraint Programming and Decision Making: Theory and Applications*, Springer Verlag, Berlin, Heidelberg, 2018, pp. 33–38.

Martine Ceberio, Olga Kosheleva, and Vladik Kreinovich, “Constraint Approach to Multi-Objective Optimization”, In: Martine Ceberio and Vladik Kreinovich (eds.), *Constraint Programming and Decision Making: Theory and Applications*, Springer Verlag, Berlin, 2018, pp. 21–26.

Chrysostomos D. Stylios and Vladik Kreinovich, “Dow Theory’s Peak-and-Trough Analysis Justified”, In: Martine Ceberio and Vladik Kreinovich (eds.), *Constraint Programming and Decision Making: Theory and Applications*, Springer Verlag, Berlin, Heidelberg, 2018, pp. 123–128.

Chitta Baral, Olac Fuentes, and Vladik Kreinovich, “Why Deep Neural Networks: A Possible Theoretical Explanation”, In: Martine Ceberio and Vladik Kreinovich

(eds.), *Constraint Programming and Decision Making: Theory and Applications*, Springer Verlag, Berlin, Heidelberg, 2018, pp. 1–6.

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## Personalia

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## Supervised Theses and Dissertations

Totally, 68 students received their Master's Degree under my supervision, and 15 students received their Ph.D.

### Master's Degrees

- 2019 Laxman Bokati, "Decision Making under Uncertainty, with Applications to Geosciences and Finance", University of Texas at El Paso.
- 2016 Andrzej Pownuk, "Combining Interval and Probabilistic Uncertainty in Engineering Applications", University of Texas at El Paso.
- 2014 Leonardo Octavio Lerma, "Towards analytical techniques for optimizing knowledge acquisition, processing, propagation, and use in cyberinfrastructure", University of Texas at El Paso.
- 2013 Omar Ochoa, "Model Fusion: A New Approach to Processing Heterogenous Data", University of Texas at El Paso.
- 2012 Christian Servin, "Propagation Of Interval and Probabilistic Uncertainty in Cyberinfrastructure-Related Data Processing and Data Fusion", University of Texas at El Paso.
- 2011 Ali Jalal-Kamali, "Estimating Statistical Characteristics Under Interval Uncertainty and Constraints: Mean, Variance, Covariance, and Correlation", University of Texas at El Paso.
- 2009 Jaime Nava, "Towards More Reliable Extrapolation Algorithms, with Applications to Organic Chemistry", University of Texas at El Paso.
- 2007 Gilbert Ornelas, "Set-Valued Extensions of Fuzzy Logic: Classification Theorems", University of Texas at El Paso.
- 2007 J. Ivan Vargas, "Fast Algorithms for Computing Odd Moments in Statistical Analysis of Privacy-Related Interval Data", University of Texas at El Paso.
- 2005 Sanjeev Chopra, "Affine arithmetic-type techniques for handling uncertainty in expert systems", University of Texas at El Paso.
- 2004 Asis Nayak, "Outlier detection under interval uncertainty in privacy-protected statistical databases", Master Project, University of Texas at El Paso.
- 2004 Raj Kandathi, "Estimating Covariance under Interval Uncertainty in Privacy-Protected Statistical Databases", University of Texas at El Paso.

- 2004 Kavitha Tupelly, “Checking if There Exists a Monotonic Function that is Consistent with the Measurement Results”, University of Texas at El Paso.
- 2004 Joseph E. Adidhela, “Using FFT-based Data Processing Techniques to Characterize Asphaltic Concrete Mixtures”, University of Texas at El Paso.
- 2004 Dong Zhang, “Optimality under Uncertainty and its Application to Automatic Non-Destructive Testing of Concrete”, University of Texas at El Paso.
- 2003 Roberto Araiza, “Optimal FFT-Based Algorithms for Referencing Multi-Spectral Images”, University of Texas at El Paso.
- 2003 Roberto Torres, “Eliminating Duplicates under Interval and Fuzzy Uncertainty: An Asymptotically Optimal Algorithm and its Geospatial Applications”, University of Texas at El Paso.
- 2003 Praveen Patangay, “Outlier Detection Under Interval Uncertainty: Algorithmic Solvability and Computational Complexity”, University of Texas at El Paso.
- 2003 Sanjaya Das, “Search engines for XML-based websites”, University of Texas at El Paso.
- 2002 Sreenath Srikrishnan, “Referencing noisy images: complexity of the problem, analysis and efficient implementation of the Fast Fourier approach”, University of Texas at El Paso.
- 2002 Bharat C. Mulupuru, “Differentiating between angular and smooth shapes in noisy computer images, on the example of non-destructive testing of aerospace structures”, University of Texas at El Paso.
- 2002 Jesus Martinez, “Towards more realistic (e.g. non-associative) “and”– and “or”–operations in fuzzy logic”, University of Texas at El Paso.
- 2002 Kiran Patel, “Non-Binary fuzzy logical operations: why they are needed in expert systems and how they are related to traditional binary logic”, University of Texas at El Paso.
- 2002 Seetharami R. Seelam, “Intelligent outlier detection and information fusion methods for noisy images, with applications to structural integrity of aerospace structures”, University of Texas at El Paso.
- 2002 Rajesh Saini, “Kolmogorov complexity for probabilistic computations: towards resource bounded Kolmogorov complexity for quantum computing”, University of Texas at El Paso.
- 2002 Lakshmi Potluri, “Correlation techniques for information fusion”, University of Texas at El Paso.

- 2001 Jan Beck, "An optimal combination of interval computations and traditional linearization, with an application to gravity databases", University of Texas at El Paso.
- 2000 Su Wang, "A new method of selecting the optimal neural network and its application to non-destructive evaluation of pavements", University of Texas at El Paso.
- 2000 Ivette Sierra, "Geometric foundations for the uniqueness of the FFT-based image mosaicking, with the application to detecting hidden text in web images", University of Texas at El Paso.
- 2000 Yohans Mendoza, "Towards mathematical foundations of information retrieval with application to fault detection in aerospace structures", University of Texas at El Paso.
- 1999 Murali Krishna, "Using symmetries to reduce the size of a fuzzy knowledge base, with an application to fault detection", University of Texas at El Paso.
- 1999 Steve Gibson, "An optimal FFT-based algorithm for mosaicking images", University of Texas at El Paso.
- 1999 Martin Schmidt, "Detecting text in web images: a complexity-based approach", University of Texas at El Paso.
- 1998 Zhibao Hu, "Best segments in representing contours", University of Texas at El Paso.
- 1998 Emilio Sanchez, "A modified learning algorithm that prevents instability frequently found in FIR back-propagation neural networks", University of Texas at El Paso.
- 1996 Brian Cloteaux, "On the Computational Power of Using Chemical Reactions", University of Texas at El Paso.
- 1996 Patrick Kahl, "Solving Narrow-Interval Linear Equation Systems Is NP-Hard", University of Texas at El Paso.
- 1996 Leticia Chee, "Computing the Value of a Boolean expression with intervals is NP-hard", University of Texas at El Paso.
- 1995 Manoranjan Baral, "Incorporating deadlines in Internet message traffic", University of Texas at El Paso.
- 1994 Srinandan Hullahalli, "Why fractionally linear formulas work well in adaptive fuzzy control?", University of Texas at El Paso.
- 1994 Raul Antonio Trejo Ramirez, "An improved rating system: its foundations and computational problems", University of Texas at El Paso.

- 1994 Luis Alfredo Cortes. "Calculating belief probabilities and intervals", University of Texas at El Paso.
- 1994 Nancy Strickland. "What can we compute if we use computational devices based on non-Newtonian physical phenomena: Church's thesis revisited", University of Texas at El Paso.
- 1994 Dana Tolbert. "Finding 'and' and 'or' operations that are least sensitive to change in intelligent control", University of Texas at El Paso.
- 1994 Navdeep Singh Chadha. "Computer vision and fractal dimension", University of Texas at El Paso.
- 1993 Sridharan Thamocharan. "Prediction paradox: neural network – a possible application to the economic prediction", University of Texas at El Paso.
- 1993 Devanand Addagatla. "How to train a space-time neural network: backpropagation approach", *Master Project*, University of Texas at El Paso.
- 1993 Karen Villaverde. "Linear-time algorithm that locates local maxima and minima of a function from given approximate measurement results", University of Texas at El Paso.
- 1993 Carlos Sandoval. "A modified learning algorithm for backpropagation networks", University of Texas at El Paso.
- 1993 Ricardo Diaz. "Maxneuron neural networks." University of Texas at El Paso.
- 1993 Joseph Lorkowski. "Analysis of the properties of a function based on approximate measurement results using semantic domains and interval methods." University of Texas at El Paso.
- 1993 Julio Peña. "Fast rotation of a 3D image about an arbitrary line." University of Texas at El Paso.
- 1993 Nitin Nilkanth Okade. "A real time algorithm for fractal analysis and its application to an early detection of epileptic seizures." University of Texas at El Paso.
- 1993 Sunil Kamat. "Efficient spare allocation for restructurable VLSI RAM chips." University of Texas at El Paso.
- 1992 Prakash Narasimhamurthy. "Application of intelligent control to congestion in computer networks". University of Texas at El Paso.
- 1992 Sukanya Krishnamurthy. "Robust statistical methods in computer vision", University of Texas at El Paso.

- 1992 Ketan Shah. "A fractionally linear method to decrease window size in the case of congestion in computer networks", University of Texas at El Paso.
- 1992 Ching-Chuan Chang. "Fast algorithm that estimates the precision of indirect measurements", *Master Project*, University of Texas at El Paso.
- 1992 Liz Kamoroff. "How to extract knowledge from an expert so that his effort is minimal", *Master Project*, University of Texas at El Paso.
- 1992 Chi-Cheng Chang. "Comparison of different fuzzy control algorithms based on computer simulation of car back-parking problem", University of Texas at El Paso.
- 1992 Monu Pradhan-Advani. "Catastrophe theory and congestion in computer networks", University of Texas at El Paso.
- 1991 Jaswinder Singh Chadha. "An automated system for inspection of solder joints using machine vision", University of Texas at El Paso.
- 1991 Nilesh Nabar. "Methodology that combines neural and analytical models and its application to composite materials", University of Texas at El Paso.
- 1991 Dharmendran Rajendran. "Application of discrete optimization techniques to the diagnostics of industrial systems", University of Texas at El Paso.
- 1991 Luis Olac Fuentes. "Applying uncertainty formalisms to well- defined problems: experimental and theoretical foundations", University of Texas at El Paso.
- 1988 Sergei Shukeilo. "A new probabilistic approach to the knapsack problem", Leningrad Electrotechnical Institute.
- 1987 Vera P. Pytchenko. "Estimating dynamic errors: general methods; applications to the new superprecise computer-controlled laser-based National temperature standard", Leningrad Polytechnical Institute.
- 1983 Roman R. Zapatrin. "Equivalence principle in the presence of physical fields: precise mathematical formalization, applications to the problem of choosing equations in curved space-time", Leningrad University.
- 1981 Tatiana Medvedeva. "Mathematical formalization of heuristic geometric methods of physics", Leningrad University.
- 1981 Svetlana Koshnyakova. "Algorithms of local differential geometry", Leningrad University.

## Ph.D. Degree Students

- 2019 Nancy Avila, “Computer-Aided Classification of Impulse Oscillometric Measures of Respiratory Small Airways Function in Children”, Bioengineering Program, University of Texas at El Paso
- 2018 Afshin Gholamy, “Backcalculation of Intelligent Compaction Data for the Mechanical Properties of Soil Geophysics”, Department of Geological Sciences, University of Texas at El Paso (PhD Committee Co-Chair with Laura Serpa)
- 2017 Andrzej Pownuk, “Combining Interval, Probabilistic, and Other Types of Uncertainty in Engineering Applications”, Computational Science Program, University of Texas at El Paso.
- 2015 Joseph A. “Joe” Lorkowski, “Bounded Rationality in Decision Making Under Uncertainty: Towards Optimal Granularity”, Department of Computer Science, University of Texas at El Paso.
- 2015 Leonardo Octavio Lerma, “Towards Analytical Techniques for Optimizing Knowledge Acquisition, Processing, Propagation, and Use in Cyberinfrastructure”, Computational Science Program, University of Texas at El Paso.
- 2013 Christian Servin, “Propagation of Interval and Probabilistic Uncertainty in Cyberinfrastructure-Related Data Processing and Data Fusion”, Computational Science Program, University of Texas at El Paso.
- 2013 Melaku Bogale, “Modeling The Human Gait Phases Using Granular Computing”, Computational Science Program, University of Texas at El Paso (PhD Committee Co-Chair with Thompson Sarkodie-Gyan)
- 2012 Francisco Zapata, “Partial Orders for Representing Uncertainty, Causality, and Decision Making: General Properties, Operations, and Algorithms”, Department of Computer Science, University of Texas at El Paso.
- 2012 Jaime Nava, “Algorithmic Aspects of Analysis, Prediction, and Control in Science and Engineering: Symmetry-Based Approach”, Department of Computer Science, University of Texas at El Paso.
- 2007 Roberto Araiza, “The Use of Interval-Related Expert Knowledge in Processing 2D and 3D Data, with an Emphasis on Applications to Geosciences and Biosciences”, Department of Computer Science, University of Texas at El Paso.
- 2007 Gang Xiang, “Fast Algorithms for Computing Statistics under Interval Uncertainty, with Applications to Computer Science and to Electrical and Computer Engineering”, Department of Computer Science, University of Texas at El Paso.

- 2004 Jan Beck, "Data Processing under a Combination of Interval and Probabilistic Uncertainty and Its Application to Earth and Environmental Studies and Engineering", Department of Computer Science, University of Texas at El Paso.
- 2003 Fariba Ansari, "Determination of dynamic elastic constants of transversely isotropic materials using computer programs", Material Science Program, University of Texas at El Paso.
- 2001 Raúl A. Trejo, "Interval computation methods and probabilistic methods for planning and plan checking under uncertainty and incomplete information", Department of Computer Science, University of Texas at El Paso.
- 1988 Inna S. Kirillova. "Optimal robust algorithms for processing the measurements results in case of a priori uncertainty". Degree awarded at the meeting of the professors of the National Institute for Electromasuring Devices, Leningrad Polytechnical Institute and Leningrad Electrotechnical Institute (These are the Leningrad Technical Universities); approved by the special meeting of the National Dissertation Committee, Moscow, USSR.

## Grants

- 2012–18 “CREST Phase II – Cyber-ShARE Center of Excellence: A center for sharing cyberresources to advance science and education”,  
National Science Foundation,  
\$4,999,439,  
co-Principal Investigator.
- 2016 “UTEP and Prudential Actuarial Science Academy and Pipeline Initiative”  
Prudential Foundation,\$200,000,  
co-Principal Investigator.
- 2009–16 “UBM – Institutional Undergraduate Training in Bioinformatics”,  
National Science Foundation,  
\$879,000,  
co-Principal Investigator.
- 2012–13 “F-transform - A New Promising Technique for Image and Signal Processing: How to Make Its Applications More Reliable”,  
Office of Naval Research,  
\$75,000,  
co-Principal Investigator.
- 2008–13 “Enhancement of Qualitative Science in Biology Curricula”,  
National Institutes of Health,  
\$1,291,697,  
co-Principal Investigator.
- 2007–12 “CREST Cyber-ShARE Center of Excellence: A center for sharing cyberresources to advance science and education”,  
National Science Foundation,  
\$4,999,889,  
co-Principal Investigator.
- 2009–11 “Application of fuzzy logic with operators in the knowledge based systems”,  
Science and Technology Centre in Ukraine (STCU), funded by European Union,  
EUR 25,260,  
Collaborator.
- 2002–07 “ITR Collaborative Research: GEON: A Research Project to Create Cyberinfrastructure for the Geosciences”,  
National Science Foundation,  
\$892,437,  
co-Principal Investigator.
- 2005–07 “Strategies for Improving Travel Time Reliability”,  
Texas Department of Transportation,  
\$200,000,  
co-Principal Investigator.



- 2006–07 “Finite Element Methods in Science and Engineering”,  
National Science Foundation,  
\$13,220,  
co-Principal Investigator.
- 2005–06 “High Assurance Systems Infrastructure”,  
Star Award from the University of Texas System,  
\$465,000,  
co-Principal Investigator.
- 2005–06 “Stochastic Process Inversion Through Radar Receiver Components”  
Army Research Lab,  
\$20,000,  
Principal Investigator.
- 1999–2006 “Pan American Center for Earth and Environmental Studies (PACES)”,  
National Aeronautic and Space Administration,  
\$6,000,000,  
co-Principal Investigator.
- 2004–05 “Enhancement of Computational Biology Curricula”  
National Institutes of Health,  
\$50,000,  
co-Principal Investigator.
- 2003–04 “New Physical-Statistical Methods and Models for Clutter”  
Army Research Lab,  
\$27,000,  
co-Principal Investigator.
- 2003–04 “Itanium 2 Equipment Grant”,  
Hewlett-Packard,  
\$94,685,  
co-Principal Investigator.
- 2001–04 “Creation of a Geospatial Data System for the Transition Zone Between the Col-  
orado Plateau and Basin & Range Provinces (Geoinformatics in Action)”,  
National Science Foundation,  
\$400,000,  
co-Principal Investigator.
- 2000–04 “Lamb Wave Scanning and Intelligent NDE Wide Area Aircraft Inspections”,  
Air Force Office of Sponsored Research AFOSR,  
\$300,000,  
co-Principal Investigator.
- 2003–04 “Acquisition of Equipment to Support Collaboration, Multi-Disciplinary Research  
and Development of Reliable Software”,

- National Science Foundation,  
\$163,793,  
co-Principal Investigator.
- 2003 “Personal Interface AccessGrid”,  
Education, Outreach and Training Partnership for Advanced Computational In-  
frastructure EOT-PACI  
\$5,199.41.
- 2003 “SC2003 Minority Serving Institutions Participation Grant”, IEEE and ACM  
\$1,400.
- 2002–03 “Development of Methodology to Characterize the Response of Military Systems  
to Battlefield Threats”,  
Army Research Lab,  
\$40,000,  
Principal Investigator.
- 2002 “SC2002 Minority Serving Institutions Participation Grant”, IEEE and ACM  
\$1,200.
- 2001–02 “Agent development and complex plan verification under uncertainty using declar-  
ative programming”,  
National Aeronautic and Space Administration,  
\$150,000,  
co-Principal Investigator.
- 2001 “SC2001 Minority Serving Institutions Participation Grant”, IEEE and ACM  
\$1,410.
- 2001 “Current trends in soft computing”,  
U.S.-Czech Science and Technology Joint Fund,  
\$7,920  
co-Principal Investigator.
- 1998–2000 “The SequenceL language and data mining”,  
National Security Agency,  
\$98,413,  
Principal Investigator.
- 1998–2000 “USA Training Technology Consortium and Dual Use Academic Liaison Program”,  
United Space Alliance,  
\$5,000,  
Principal Investigator.
- 1997–2000 “Interval Computation and Maximum Entropy Methods”,  
United Space Alliance,  
\$9,599,  
Principal Investigator.

- 1997–2000 “Reasoning about Actions and Plans”,  
United Space Alliance,  
\$68,608,  
Principal Investigator.
- 1997–2000 “An Undergraduate Laboratory for Building and Programming Mobile Robots”,  
National Science Foundation,  
\$40,000,  
co-Principal Investigator.
- 1998–99 “Detection of text images in web pages”,  
National Security Agency,  
\$101,293,  
co-Principal Investigator.
- 1994–97 “Electrical Engineering and Computer Science Projects to Support Research  
at the National Solar Observatory”,  
National Science Foundation,  
\$39,670,  
co-Principal Investigator.
- 1994–96 “Intelligent control: which algorithm to choose”,  
*National Aeronautic and Space Administration*,  
\$62,326,  
Principal Investigator.
- 1993–94 “Towards combined methods of processing uncertainty  
in intelligent control systems”,  
*National Science Foundation*,  
\$10,000.00,  
co-Principal Investigator.
- 1990–95 “A center for excellence for Computer Science Education and Research”,  
*National Science Foundation*,  
\$1,543,192,  
co-Principal Investigator.
- 1991–92 “Towards a new generation of machine vision inspection systems:  
combining statistical and expert system approaches”,  
A grant from the *General Services Administration*  
administered by the *Institute for Manufacturing and Materials Management*,  
\$57,967,  
co-Principal Investigator.
- 1990–92 “Uncertainty reasoning in expert systems”,  
*National Aeronautic and Space Administration*,  
\$62,326,  
Principal Investigator/Project Director.

- 1989           Invited to Stanford University as a co-investigator on the *McCarthy Foundation* grant on the analysis of relations between Philosophy and Artificial Intelligence.
- 1989           “Analysis of the existing expert systems for the instruments automation and designing new expert system shells for that purpose”,  
Grant No. 7550-9241-40 from the *Soviet Science Foundation*,  
Principal Investigator.
- 1988–89       “Designing the methods that use a priori knowledge about the objects to increase precision and reliability of measurement results”,  
Grant No. 7550-8180-40 from the *Soviet Science Foundation*,  
Principal Investigator.
- 1988–89       “Theoretical foundations for estimating numerical precision of software in intellectual systems for control and measurement”,  
Grant No. 7550-8170-40 from the *Soviet Science Foundation*,  
Principal Investigator.
- 1988–89       “Standardizing the precision characteristics for software used in control and measurement”,  
Grant from the *Soviet National Bureau of Standards*,  
co-Principal Investigator.
- 1988–89       “A computer-based real-time system for data acquisition and processing in marine geology”,  
Grant from the *Soviet Ministry of Geology*,  
co-Principal Investigator.
- 1988–89       “A knowledge-based navigation system”,  
Grant from the *Soviet Ministry of Marine Industry* and  
*National Bureau of Cartography and Geodesy, Soviet Ministry of Defense*,  
co-Principal Investigator.
- 1987–88       “Metrological principles for the multifunctional multiprocessor-based measuring instruments, that measure alternating current by measuring its instant values”,  
Grant No. 7550-8198-40 from the *Soviet Science Foundation*,  
co-Principal Investigator.
- 1986–87       “Metrological standardization of the digital algorithms used in control and measuring systems”,  
Grant No. 7550-6627-40 from the *Soviet Science Foundation*,  
Principal Investigator.
- 1986–87       “Methods of designing hardware for filtering and errors correction for dynamical measuring systems”,  
Grant No. 2470-6117-13 from the *Soviet Science Foundation*,  
co-Principal Investigator.

- 1986–87 “Analysis of the present state of metrology in instruments industry and possible methods of its improvement”,  
Grant No. 2470-6107-13 from the *Soviet Ministry of Defense* and  
*Soviet Science Foundation*,  
co-Principal Investigator.
- 1985–86 “Metrological analysis of the algorithms, that process the measured information and take into consideration the a priori knowledge about the measured object”,  
Grant No. 0471-5226-40 from the *Soviet Science Foundation*,  
co-Principal Investigator.
- 1984–86 “Methods of correcting the errors of dynamic measurements”,  
Grants No. 0471-4225-40 and 0471-5226-40 from the *Soviet Science Foundation*,  
co-Principal Investigator.
- 1984–86 “Designing an adaptive robototechnical module for highly reliable flexible automatic industrial systems”,  
Grant No. 0107-4346-10 from the *Soviet Science Foundation*,  
co-Principal Investigator.
- 1984–85 “Metrological characteristics for computational algorithms used in measuring systems”,  
Grant No. 0471-4225-40 from the *Soviet Science Foundation*,  
Principal Investigator.
- 1983–84 “Designing the unified complex of algorithms for metrological tests in the instruments industry”,  
Grant No. 0471-3714-10 from the *Soviet Science Foundation*,  
co-Principal Investigator.
- 1983–84 “Designing the standard characteristic of the aperture error and methods for estimating these characteristics”,  
Grant from the *Soviet Science Foundation*,  
co-Principal Investigator.
- 1982 “Automatic control system for psychological experiments”,  
Grant No. 0471-2213-20 from the *Soviet Science Foundation*,  
co-Principal Investigator.
- 1980–82 “Automatic system for quick education of computer operators”,  
Grant No. 0471-0212-60 from the *Soviet Science Foundation*,  
co-Principal Investigator.

## Society Membership, Society Offices, Editorship, Refereeing

### Membership in Professional Societies

1991-present	Association for Computing Machinery (ACM); Senior Member since 2018
2015-present	ACM Special Interest Group in High-Performance Computing (SIGHPC)
1991-present	Association for Advancement of Artificial Intelligence (AAAI)
2009-present	AHP Academy – Association for Decision Making
2008-present	American Geophysical Union (AGU)
1978-present	American Mathematical Society (AMS)
2008-present	American Physical Society (APS)
2007-present	Association for Symbolic Logic (ASL)
1988-present	Balkan Logical Society
1998-present	Biomathematics and Scientific Computations (a section of the Union of the Mathematicians in Bulgaria)
2008-present	Computability in Europe Association (CiE)
1989-present	European Association for Theoretical Computer Science (EATCS)
2015-present	European Association for Theoretical Computer Science (EATCS), Russian Chapter
2010-present	European Society for Fuzzy Logic and Technology (EUSFLAT)
2006-present	Geological Society of America (GSA)
1995-present	Gessellschaft für Angewandte Mathematik und Mechanik (GAMM) International Association of Applied Mathematics and Mechanics
1991-present	IEEE; Senior Member since 2008
2002-present	IEEE Computational Intelligence Society
1991-present	IEEE Computer Society

2010-present	IEEE Systems, Man, and Cybernetics Society
2015-present	IEEE Technical Committee on Parallel Processing (TCPP)
1992-present	Interest Group in Pure and Applied Logic (in 1992–1993: Interest Group in Propositional and Predicate Logics)
2008-present	International Physics and Control Society
1991-present	International Quantum Structures Association (IQSA)
2006-present	International Society for Imprecise Probability: Theories and Applications (SIPTA)
2010-present	Mexican Society of Artificial Intelligence (SMIA)
1992-present	Neural Modeling Society
1993-present	North American Fuzzy Information Processing Society (NAFIPS)
1998-present	Russian Academy of Metrological Sciences (Foreign Member)
2014-present	Scandinavian Logic Society
1991-present	Sigma Xi, Scientific Research Society
2011-present	Society for Effective Teaching (SET)
2010-present	Society for Industrial and Applied Mathematics (SIAM), University of Texas at El Paso (UTEP) Chapter
2005-present	Society for Mathematics of Uncertainty
1995-present	St. Petersburg Mathematical Society, Russia
1998-present	Texas Action Group (TAG): The University of Texas Research Group for the Study of Reasoning about Actions
1992-present	Upsilon Pi Epsilon (UPE), Computer Science Honor Society
1999-present	Vietnam Fuzzy Systems Society (Foreign Member)
2002–present	Working Group on Interval Methods for Control, part of the IEEE Control Systems Society Technical Committee on Computer Aided Control System Design
2002–present	Working Group on Soft Computing in Image Processing SCIP

2006–12	Association of Mathematics Teacher Educators (AMTE)
2005–07	Association for Computing Machinery (ACM) Special Interest Group on Applied Computing SIGAPP
2012	IEEE Communication Society
1989	Soviet Association for Pure and Applied Logic
1982–89	Soviet National Society on Instruments Theory
1980–84	Soviet National Association of Young Scientists
1987–89	St. Petersburg Mathematical Society, Russia

### **Offices held in professional societies**

2019	Member, Board of Governors, IEEE Systems, Man, and Cybernetics Society
2017–19	Member, IEEE Periodical Review and Advisory Committee (PRAC)
2017–19	Vice President, International Fuzzy Systems Association (IFSA)
2017–19	Vice President, European Society for Fuzzy Logic and Technology (EUSFLAT)
2015–18	Vice President Publications, IEEE Systems, Man, and Cybernetics Society
1995–present	co-founder and co-maintainer, official Interval Computations website <a href="http://cs.utep.edu/interval-comp/main.html">http://cs.utep.edu/interval-comp/main.html</a>
1994–present	Berkeley Initiative for Soft Computing (BISC), El Paso representative
1992–present	Center for Fuzzy Logic and Intelligent Systems Research, Coordinator for University of Texas at El Paso
2003–present	Fuzzy Logic and the INternet (FLINT), Special Interest Group (SIG) of the Berkeley Initiative for Soft Computing (BISC), Member, International Advisory Committee
2004–present	Member, Fuzzy Technical Committee, IEEE Computational Intelligence Society
2014–present	International Society of Management Engineers (ISME), Life Fellow
2011–present	International Society of Management Engineers (ISME), Member, Executive Board
1992–present	Neural Modeling Society, El Paso Coordinator



- 1997–present SIGInterval, BISC Special Interest Group in Interval Methods in Knowledge Representation, coordinator
- 2014–present Elite Member, Society for Mathematics of Uncertainty
- 2007–present Vice Chair, Task Force on Extensions to Type-1 Fuzzy Sets, IEEE Computational Intelligence Society
- 2012–14 President, North American Fuzzy Information Processing Society (NAFIPS)
- 2012–14 Member, Board of Governors, Systems, Man, and Cybernetics Society (SMC) of the Institute of Electrical and Electronics Engineers (IEEE)
- 2014 Member, Transactions on Fuzzy Systems Outstanding Paper Award Committee, IEEE Computational Intelligence Society
- 2013 Chair, Fuzzy Technical Committee, IEEE Computational Intelligence Society
- 2010–12 President-Elect, North American Fuzzy Information Processing Society (NAFIPS)
- 2009–10 Member, Board of Directors, North American Fuzzy Information Processing Society (NAFIPS)
- 2003–07 Chair, Task Force on Interval Computations and Fuzzy Techniques, IEEE Computational Intelligence Society
- 2000–02 SIG GrC, Berkeley Initiative for Soft Computing (BISC) Special Interest Group on Granular Computing, Chair
- 1998 Biomathematics and Scientific Computations (a section of the Union of the Mathematicians in Bulgaria), co-organizer
- 1993–96 Association for Computing Machinery, Rio Grande Chapter, El Paso representative
- 1992–93 Sigma Xi, Scientific Research Society, President of El Paso Chapter
- 1989 Soviet Association for Pure and Applied Logic, Leningrad Branch, Vice-President
- 1982–84 Soviet National Association of Young Scientists, Leningrad Branch, Vice-President

### **Society committee membership**

- 2019 IEEE Computational Intelligence Society Outstanding Early Career Award Subcommittee, Member
- 2016 IEEE Systems, Man, and Cybernetics Society Finance Committee, Member

- 2016 IEEE Computational Intelligence Society, Early Career Award Subcommittee, Chair
- 2015–2016 IEEE Systems, Man, and Cybernetics Society Human-Machine Systems Committee, Member
- 2011–present IEEE Systems, Man, and Cybernetics Society, Technical Committee on Soft Computing, Member
- 2008–present Decision Analysis and Support (DAS), Special Interest Group (SIG) of the Berkeley Initiative for Soft Computing (BISC), Member
- 2015–present IEEE Computational Intelligence Society, Member of the Awards Committee
- 2007–present IEEE Computational Intelligence Society, Member of the Task Force on Extensions to Type-1 Fuzzy Sets
- 2007–present International Astronomical Union (IAU), member of Commission 52 “Relativity in Fundamental Astronomy”
- 2004–present IEEE Computational Intelligence Society; member of the Task Force on Granular Computing
- 2006–present IEEE Computational Intelligence Society; member of the AdHoc Committee to Study the Creation of the Technical Committee on Granular Computing
- 2003–present IEEE Computational Intelligence Society; member of the Fuzzy Technical Committee
- 2008–14 Gesellschaft für Angewandte Mathematik und Mechanik (GAMM) International Association of Applied Mathematics and Mechanics; member of GAMM Committee on Computer-Assisted Proofs and Symbolic Computations
- 1996–2007 Gesellschaft für Angewandte Mathematik und Mechanik (GAMM) International Association of Applied Mathematics and Mechanics; member of GAMM Committee on Computer Arithmetic and Scientific Computations

### **Editorships of Journals and Book Series**

- 2018–present Associate Editor, *Asian Journal of Economics and Banking*
- 2016–present Member of the Scientific Committee, *Sistemas y Telematica*
- 2014–present Member of the Advisory Board, *Advances in Intelligent Systems and Computing*, Springer book series

2013–present Member of the Editorial Board, *Archives of Philosophy and History of Fuzziness*

2007–present Member of the Editorial Board, *Computational Technologies*

2010–present Associate Editor, *Finanmetrika*

2011–present Member of the Editorial Board, *ICTACT Journal on Soft Computing*

2019–present Member of the Editorial Board, *IEEE Systems, Man, and Cybernetics Magazine*

2006–present Member of the Editorial Board, *International Journal of Approximate Reasoning*

2005–present Member of the Editorial Board, *International Journal of Computational Intelligence Research*

2013–present Member of the Advisory Board, *International Journal of Fuzzy Computation and Modeling (IJFCM)*

2000–present Member of the Editorial Board, *International Journal of General Systems*

2008–present Member of the Editorial Board, *International Journal of Intelligent Systems Science and Technology*

2007–present Member of the Editorial Board, *International Journal of Intelligent Technologies and Applied Statistics*

1996–present Editor, section on interval methods, *International Journal on Uncertainty, Fuzziness, and Knowledge-Based Systems*

2004–present Member of the Editorial Board, *Journal of Advanced Computational Intelligence and Intelligent Informatics (JACIII)*

2019–present Associate Editor, *Journal of Artificial Intelligence and Soft Computing Research*

1998–present Member of the Editorial Advisory Board, *Journal of Intelligent and Fuzzy Systems*

2006–present Associate Editor, *Journal of Uncertain Systems*

2012–present Member of the Editorial Board, *Mathematical Structures and Modeling*

2011–present Member of the Editorial Board, *Neural Computing and Applications*

2019–present Member of the Editorial Board, *Ontology of Designing*

1995–present Member of the Editorial Board, *International Journal Reliable Computing*

2011–present Associate Editor, *Soft Computing*

- 2004–present Member of the Editorial Board, *Soft Computing Bulletin*
- 2009–present Member of the Editorial Board, *Soft Computing, Modeling and Simulation*
- 2015–16 Member of the Editorial Board, *Symmetry*
- 2007–present Member of the Editorial Board, *Thailand Statistician: Journal of Thai Statistical Association (TSJTSA)*
- 1996–99 Editor, application section, International Journal *Reliable Computing*
- 1994 Member of the Editorial Board, International Journal *Interval Computations*
- 1989 Member of the Editorial Board, Proceedings of the National Research Institute of Electrical Measuring Instruments, Leningrad, USSR

### **Editorships of the Special Issues of the Journals**

- 2020 Guest Associate Editor, a special issue of *Journal of Computational and Applied Mathematics (JCAM)* on Scientific Computing, Computer Arithmetic, and Verified Numerical Computation; Guest Editors Mitsuhiro T. Nakao, Siegfried M. Rump, and Takeshi Ogita
- to appear Co-editor, a special issue of *Journal of Intelligent and Fuzzy Systems* on Similarity, Correlation, and Association Measures; with Ildar Batyrshin, Valerie Cross, and Maria Rifqi
- 2019 Co-editor, a special issue of *Journal of Uncertain Systems* on Uncertainty, 2019, Vol. 13; with Martine Ceberio
- 2018 Co-editor, a special issue of *Journal of Uncertain Systems* on Uncertainty, 2018, Vol. 12, No. 3; with Martine Ceberio
- 2018 Co-editor, special section of *Intelligent Automation and Soft Computing* on Z-Numbers and Applications, 2018, Vol. 24, No. 1; with Rafik Aliev, Burhan Turksen, and Karl Walter Bonfig
- 2017 Co-editor, a special issue of *Journal of Uncertain Systems* on Uncertainty, 2017, Vol. 11; with Martine Ceberio
- 2017 Co-editor, a special volume of *Reliable Computing* on SCAN'2016 papers, Vol. 25; with Warwick Tucker
- 2016 Co-editor, a special issue of *Journal of Uncertain Systems* on Uncertainty, 2016, Vol. 10; with Martine Ceberio

- 2016 Co-editor, a special issue of *International Journal of Intelligent Systems on Fuzzy Theory*, 2016, Vol. 31, No. 3; with Hung T. Nguyen
- 2015 Co-editor, a special issue of *International Journal of Uncertainty, Fuzziness, and Knowledge-Based Systems on Fuzzy Sets*, 2015, Vol. 23, Suppl. 1; with Hung T. Nguyen
- 2015 Co-editor, a special issue of *Journal of Uncertain Systems on Uncertainty*, 2015, Vol. 9, No. 2; with Martine Ceberio
- 2014 Co-editor, a special issue of *Journal of Uncertain Systems on Uncertainty*, 2014, Vol. 8, No. 3; with Martine Ceberio
- 2013 Co-editor, a special issue of *International Journal of Approximate Reasoning on Uncertainty in Financial Econometrics*, 2013, Vol. 54, No. 6; with Van-Nam Huynh
- 2013 Co-editor, a special issue of *Journal of Uncertain Systems on Uncertainty*, 2013, Vol. 7, No. 3; with Martine Ceberio
- 2012 Co-editor, a special issue of *Journal of Uncertain Systems on Uncertainty*, 2012, Vol. 6, No. 2; with Martine Ceberio
- 2011 Co-editor, a special issue of *Fuzzy Sets and Systems on Fuzzy Transform*, 2011, Vol. 180, No. 1; with Irina Perfilieva
- 2011 Co-editor, a special issue of *Reliable Computing* with selected papers from SCAN'2008, 2011, Vol. 15; with Martine Ceberio
- 2011 Co-editor, a special issue of *Journal of Advanced Computational Intelligence and Intelligent Informatics (JACIII)*, 2011, Vol. 15, No. 4; with Vyacheslav Kalashnikov
- 2011 Co-editor, a special issue of *Journal of Uncertain Systems on Uncertainty*, 2011, Vol. 5, No. 2; with Martine Ceberio
- 2010 Co-editor, a special issue of *Journal of Uncertain Systems on Uncertainty*, 2010, Vol. 4, No. 4; with Martine Ceberio
- 2009 Co-editor, a special section of *International Journal of Approximate Reasoning on Interval/Probability Uncertainty*, 2009, Vol. 50, No. 8; with Van-Nam Huynh
- 2008 Co-editor, a special issue of *International Journal of Intelligent Systems on Decision Science: Foundations and Applications*, 2009, Vol. 24, No. 1; with Hung T. Nguyen
- 2008 Co-editor, a special issue of *International Journal of Automation and Control (IJAAC)* on selected papers from InTech'07, 2008, Vol. 2, No. 2/3; with Quang P. Ha and Gamini Dissanayake

- 2007 Co-editor, a special issue of *Journal of Advanced Computational Intelligence and Intelligent Informatics (JACIII)* on Selected Papers from InTech'2005, 2007, Vol. 11, No. 10; with Jirapun Daengdej, Pratit Santiprabhob, and Hung T. Nguyen
- 2007 Editor, a special issue of *Journal of Uncertain Systems* on Uncertainty, 2007, Vol. 1, No. 4.
- 2007 Co-editor, a special issue of *Information Sciences* on Mathematical Foundations for Intelligent Technologies, Vol. 177, No. 16; with Hung T. Nguyen and Sompong Dhompongsa
- 2006 Co-editor, a special issue of *Journal of Advanced Computational Intelligence and Intelligent Informatics (JACIII)* on Selected Papers from InTech'2004, Vol. 10, No. 3; with Richard Aló.
- 2004 Co-editor, a special issue of *Soft Computing* on Advanced Soft Computing and Its Applications, Vol. 8, No. 4; with Vilem Novak, Irina Perfilieva, and Hung T. Nguyen
- 2004 Co-editor, a special issue of *International Journal of Intelligent Systems* on Intelligent Technologies, Vol. 19, No. 1/2; with Hung T. Nguyen, Nadipuram S. Prasad, and Pratit Santiprabhob
- 2001 Co-editor, a special issue of *International Journal of Uncertainty, Fuzziness and Knowledge-Based Systems* on Intelligent Technologies, Vol. 9, No. 6; with Nadipuram S. Prasad, and Pratit Santiprabhob
- 1999 Co-editor, a special issue of *International Journal on Uncertainty, Fuzziness, and Knowledge-Based Systems (IJUFKS)* on Fuzzy Systems and Their Applications, Vol. 7, No. 4, with Nguyen Hoang Phuong and Ario Ohsato
- 1997 Co-editor, special issue of the International Journal *Annals of Mathematics and Artificial Intelligence (AMAI)* on Logic Programming, Nonmonotonic Reasoning, and Reasoning about Actions, Vol. 21, No. 2–4; with Chitta Baral and Vladimir Lifschitz
- 1997 Editor, a special issue of *International Journal of Uncertainty, Fuzziness and Knowledge-Based Systems* on Interval Methods in Representing and Processing Uncertainty; Vol. 5, No. 3
- 1995–98 Co-editor, special issues of the International Journal *Reliable Computing* devoted to student papers, 1995, Vol. 1, No. 3; 1996, Vol. 2, No. 3; 1998, Vol. 4, No. 1; with Günther Mayer
- 1994 Co-editor, a special issue of the International Journal *Interval Computations* on Parallel Computations, No. 3

## Editorships of Book Translations

- 2005 Co-editor, Russian translation of R. Hammer, M. Hocks, U. Kulisch, D. Ratz, *Numerical Toolbox for Verified Computing*, RHD Publ., Moscow, 2005; with Andrei N. Solovevski and Alexander G. Yakovlev

## Conference Organization

- 2022 The 2022 International IEEE Conference on Systems, Man, and Cybernetics IEEE SMC'2022, Prague, Czech Republic, October 2022 (Co-Chair, Program Committee)
- 2020 IEEE Symposium on Computational Intelligence for Engineering Solutions CIES'2020, Canberra, Australia, December 1–4, 2020 (Symposium Co-Chair)
- 2020 9th International Workshop on Reliable Engineering Computing REC'2020, Taormina, Italy, May 17–20, 2020 (Scientific Committee)
- 2020 3rd International Conference on Financial Econometrics, Vung Tau and Ho Chi Minh City, Vietnam, January 13–16, 2020 (Scientific Committee)
- 2020 13th International Conference of Thailand Econometric Society, Chiang Mai, Thailand, January 8–10, 2020 (Scientific Committee)
- 2020 The First International Conference on Artificial Intelligence and Computational Intelligence AICI'2020, Hanoi, Vietnam, January 4–6, 2020 (Co-Chair, Scientific Committee)
- 2019 IEEE Symposium on Computational Intelligence for Engineering Solutions CIES'2019, Xiamen, China, December 6–9, 2019 (Symposium Co-Chair)
- 2019 International Conference of the European Society for Fuzzy Logic and Technology EUSFLAT'2019, Prague, Czech Republic, September 9–13, 2019 (Publicity Co-Chair)
- 2019 Mini-Symposium on High Performance Computing Interval Methods at 12th International Conference on Parallel Processing and Applied Mathematics PPAM'2019, Bialystok, Poland, September 8–11, 2019 (Symposium Co-Chair)
- 2019 13th International Conference on Parallel Processing and Applied Mathematics PPAM'2019, Bialystok, Poland, September 8–11, 2019 (Program Committee)
- 2019 28th International Joint Conference on Artificial Intelligence IJCAI'2019, Macao, China, August 10–16, 2019 (Program Committee)

- 2019 8th International Conference on Simulation and Modeling Methodologies, Technologies and Applications SIMULTECH'2019, Prague, Czech Republic, July 29–31, 2019 (Program Committee)
- 2019 The Eleventh International Symposium on Imprecise Probability: Theories and Applications ISIPTA'2019, Ghent, Belgium, July 3–6, 2019 (Program Committee)
- 2019 IEEE International Conference on Fuzzy Systems FUZZ-IEEE'2019, New Orleans, Louisiana, June 23–26, 2019 (Program Committee)
- 2019 World Congress of the International Fuzzy Systems Association, joint with the Annual Conference of the North American Fuzzy Information Processing Society IFSA/NAFIPS'2019, Lafayette, Louisiana, June 18–21, 2019 (Member of Scientific Committee; Chair of Best Student Paper Awards Committee)
- 2019 3rd International Conference and Summer School “Numerical Computations: Theory and Algorithms” NUMTA'2019, TH Le Castella Village Resort, Calabria, Italy, June 15–21, 2019 (Program Committee)
- 2019 Days of Logic and Computability Conference, St. Petersburg, Russia, May 23–26, 2019 (Program Committee)
- 2019 XXII International Conference on Soft Computing and Measurement SCM'2019, St. Petersburg, Russia, May 23–25, 2019 (Program Committee)
- 2019 Uncertain Reasoning Special Track at the Florida AI Research Society Conference FLAIRS'2019, Sarasota, Florida, May 19–22, 2019 (Program Committee)
- 2019 International Conference on Information Technologies: Information and Communication Technologies for Research and Industry ICIT'2019, Saratov, Russia, February 7–8, 2019 (Co-Chair, Program Committee)
- 2019 2nd International Conference on Financial Econometrics, Ho Chi Minh City, Vietnam, January 14–16, 2019 (Scientific Committee)
- 2019 12th International Conference of the Thailand Econometric Society TES'2019, Chiang Mai, Thailand, January 9–11, 2019 (Scientific Committee)
- 2018 IEEE International Conference on Intelligent Systems and Green Technology, Visakhapatnam, India, December 23, 2018 (Program Committee)
- 2018 7th International Conference on the Theory and Practice of Natural Computing TPNC'2018, Dublin, Ireland, December 12–14, 2018 (Program Committee)
- 2018 International Workshop on Modelling, Simulation and Optimization for Geosciences and Petroleum Engineering 2018 MSO-Geo&PE'18, Kitakyushu, Japan, December 2–5, 2018 (Advisory Committee)



- 2018 IEEE Symposium on Computational Intelligence for Engineering Solutions CIES'2018, Bengaluru, India, November 18–21, 2018 (Symposium Co-Chair)
- 2018 3rd Regional Consortium for Computing Sciences and Their Foundation RCCS'2018, Cd. Juarez, Mexico, November 8–9, 2018 (Program Committee)
- 2018 IEEE International Conference on Systems, Man, and Cybernetics, Miyazaki, Japan, October 7–10, 2018 (Program Committee)
- 2018 10th International Joint Conference on Computational Intelligence IJCCI'2018, Seville, Spain, September 18–20, 2018 (Program Committee)
- 2018 The 18th International Symposium on Scientific Computing, Computer Arithmetic, and Verified Numerical Computations SCAN'2018, Tokyo, Japan, September 10–15, 2018 (Scientific Committee)
- 2018 Twelfth International Workshop on Fuzzy Logic and Applications WILF'2018, Santa Margherita Ligure, Italy, September 6–8, 2018 (Program Committee)
- 2018 8th International Conference on Simulation and Modeling Methodologies, Technologies and Applications SIMULTECH'2018, Porto, Portugal, July 29–31, 2018 (Program Committee)
- 2018 IEEE International Conference on Fuzzy Systems FUZZ-IEEE'2018, Rio de Janeiro, Brazil, July 8–13, 2018 (Program Committee Co-Chair; Best Paper Award Committee Chair)
- 2018 37th Annual Conference of the North American Fuzzy Information Processing Society NAFIPS'2018, Fortaleza, Brazil, July 4–6, 2018 (Program Committee)
- 2018 17th International Conference on Information Processing and Management of Uncertainty in Knowledge-Based Systems IPMU'2018, Cadiz, Spain, June 11–15, 2018 (Program Committee)
- 2018 International Conference on Data Science and Intelligent Analysis of Information ICDSIAI'2018, Kiev, Ukraine, June 4–7, 2018 (Program Chair)
- 2018 7th World Conference on Soft Computing, Baku, Azerbaijan, May 28–31, 2018 (Co-Chair, Program Committee; Co-Chair, Special Sessions Committee)
- 2018 First International Econometric Conference of Vietnam ECONVN'2018, Ho Chi Minh City, January 15–16, 2018 (International Steering Committee)
- 2018 The Eleventh International Conference of the Thailand Econometric Society TES'2018, Chiang Mai, Thailand, January 10–12, 2018 (Scientific Committee)

- 2017 International Workshop on Modelling, Simulation and Optimization for Geosciences and Petroleum Engineering 2017 MSO-Geo&PE'17, Seri Iskandal, Perak, Malaysia, December 17-18, 2017 (Advisory Committee)
- 2017 IEEE Symposium on Computational Intelligence for Engineering Solutions CIES'2017, Honolulu, Hawaii, November 27 – December 1, 2017 (Symposium Co-Chair)
- 2017 International Joint Conference on Computational Intelligence IJCCI'2017, Funchal, Madeira, Portugal, November 1–3, 2017 (Program Committee)
- 2017 The 36th Annual Conference of the North American Fuzzy Information Processing Society NAFIPS'2017, Cancun, Mexico, October 16–18, 2017 (Program Committee)
- 2017 The First International Conference on Symmetry Symmetry'2017, Barcelona, Spain, October 15–17, 2017 (Scientific Committee)
- 2017 The 2017 IEEE International Conference on Systems, Man, and Cybernetics IEEE SMC'2017, Banff, Canada, October 5–8, 2017 (Technical Program Committee; Best Student Paper Award Committee; Best Paper Award Committee)
- 2017 The 10th Conference of the European Society for Fuzzy Logic and Technology Eusflat'2017, Warsaw, Poland, September 11–15, 2017 (Advisory Board)
- 2017 Mini-Symposium on High Performance Computing Interval Methods at 12th International Conference on Parallel Processing and Applied Mathematics PPAM'2017, Lublin, Poland, September 10–13, 2017 (Symposium Co-Chair)
- 2017 7th International Conference on Simulation and Modeling Methodologies, Technologies and Applications SIMULTECH'2017, Madrid, Spain, July 29–31, 2017 (Program Committee)
- 2017 The Tenth International Symposium on Imprecise Probability: Theories and Applications ISIPTA'17, Lugano, Switzerland, July 10–14, 2017 (Program Committee)
- 2017 IEEE International Conference on Fuzzy Systems FUZZ-IEEE'2017, Naples, Italy, July 9–12, 2017 (Special Sessions Co-Chair)
- 2017 Joint 17th World Congress of International Fuzzy Systems Association and 9th International Conference on Soft Computing and Intelligent Systems IFSA-SCIS'2017, Otsu, Japan, June 27–30, 2017 (Program Committee)
- 2017 The 30th International Conference on Industrial, Engineering and Other Applications of Applied Intelligent Systems IEA-AIE'2017, Arras, France, June 27–30, 2017 (Program Committee)

- 2016 11th International Workshop on Fuzzy Logic and Applications WILF'2016, Napoli, Italy, December 19–21, 2016 (Program Committee)
- 2016 The 7th International Conference on Sciences of Electronics, Technologies of Information and Telecommunications SETIT'2016, Hammamet, Tunisia, December 18–20, 2016 (Scientific Committee)
- 2016 IEEE Symposium on Computational Intelligence for Engineering Solutions CIES'2016, Athens, Greece, December 6–9, 2016 (Symposium Co-Chair)
- 2016 Annual Conference of the North American Fuzzy Information Processing Society NAFIPS'2016, El Paso, Texas, October 31 – November 4, 2016 (Conference Co-Chair)
- 2016 The 2016 IEEE International Conference on Systems, Man, and Cybernetics IEEE SMC'2016, Budapest, Hungary, October 9–12, 2016 (Publicity Co-Chair)
- 2016 17th International Symposium on Scientific Computing, Computer Arithmetic, and Verified Numerical Computation SCAN'2016, Uppsala, Sweden, September 26–30, 2016 (Scientific Committee)
- 2016 8th International IEEE Conference on Intelligent Systems, Sofia, Bulgaria, September 4–6, 2016 (International Program Committee)
- 2016 12th International Conference on Natural Computation, Fuzzy Systems, and Knowledge Discovery ICNC-FSKD'2016, Changsha, China, August 13–15, 2016 (Technical Program Committee)
- 2016 6th International Conference on Simulation and Modeling Methodologies, Technologies and Applications SimulTech'2016, Colmar, Alsace, France, July 21–23, 2016 (Program Committee)
- 2016 16th International Conference on Information Processing and Management of Uncertainty in Knowledge-Based Systems IPMU'2016, Eindhoven, The Netherlands, June 20–24, 2016 (Program Committee)
- 2016 7th International Workshop on Reliable Engineering Computing REC'2016, Bochum, Germany, June 15–17, 2016 (International Scientific Committee)
- 2016 6th World Conference on Soft Computing, Berkeley, California, May 22–25, 2016 (Co-Chair, Program Committee)
- 2016 Thirtieth AAAI Conference on Artificial Intelligence AAAI'16, Phoenix, Arizona, USA, February 12–17, 2016 (Program Committee)
- 2015 The 6th International Conference on Innovations in Bio-inspired Computing and Applications IBICA'15, Kochi, India, December 16–18, 2015 (Program Committee)

- 2015 IEEE Symposium on Computational Intelligence for Engineering Solutions CIES'2015, Cape Town, South Africa, December 7–10, 2015 (Symposium Co-Chair)
- 2015 IEEE Symposium on Foundations of Computational Intelligence FoCI'15, Cape Town, South Africa, December 7–10, 2015 (Program Committee)
- 2015 IEEE Workshop on Computational Intelligence Tools WCIT'2015, Cape Town, South Africa, December 7–10, 2015 (Technical Program Committee)
- 2015 2015 International Conference on Fuzzy Theory and Its Applications iFUZZY'2015, Yilan, Taiwan, November 18–20, 2015 (International Advisory Committee)
- 2015 7th International Conference on Soft Computing and Pattern Recognition SoC-PaR'2015, Fukuoka, Japan, November 13–15, 2015 (Publicity Committee)
- 2015 International Conference on Fuzzy Computation Theory and Applications FCTA'2015, Lisbon, Portugal, November 12–14, 2015 (Program Committee)
- 2015 14th Mexican International Conference on Artificial Intelligence MICAI'2015, Cuernavaca, Mexico, October 25–31, 2015 (Program Committee)
- 2015 Fourth International Symposium on Integrated Uncertainty in Knowledge Modelling and Decision Making IUKM'2015, Nha Trang, Vietnam, October 15–17, 2015 (Technical Program Committee)
- 2015 First International Conference on Interdisciplinary Development Research IDR'2015, Chiang Mai, Thailand, September 17–18, 2015 (Scientific Committee)
- 2015 Annual Conference of the North American Fuzzy Information Processing Society NAFIPS'2015 and 5th World Conference on Soft Computing, Redmond, Washington, August 17–19, 2015 (Conference Co-Chair)
- 2015 IEEE International Conference on Fuzzy Systems FUZZ-IEEE'2015, Istanbul, Turkey, August 2–5, 2015 (Special Session Co-Chair)
- 2015 International Symposium on Imprecise Probability: Theories and Applications ISIPTA'15, Pescara, Italy, July 20–24, 2015 (Program Committee)
- 2015 World Congress of the International Fuzzy Systems Association IFSA'2015, Asturias, Spain, June 30 – July 3, 2015 (Special Sessions Co-Chair)
- 2015 1st International Summer School for Sciences, History and Philosophy of Sciences & Science Education: New Educational and Fundamental Insights for Sciences and History-Epistemology-Philosophy of Sciences, & Science Education ISSHPSE'2015, Lille, France, June 22–26, 2015 (Scientific Committee)

- 2015 IEEE Congress on Evolutionary Computation IEEE CEC'2015, Sendai, Japan, May 25–28, 2015 (Program Committee)
- 2015 International Conference on Intelligent Information Analysis, Kiev, Ukraine, May 20–22, 2015 (Program Committee)
- 2014 IEEE Symposium on Computational Intelligence for Engineering Solutions CIES'2014, Orlando, Florida, December 9–12, 2014 (Symposium Co-Chair)
- 2014 IEEE Symposium on Foundations of Computational Intelligence FOCI'14, Orlando, Florida, December 9–12, 2014 (Program Committee)
- 2014 2014 International Conference on Fuzzy Theory and Its Applications iFUZZY'2014, Kaohsiung, Taiwan, November 24–26, 2014 (Advisory Committee)
- 2014 13th Mexican International Conference on Artificial Intelligence MICAI'2014, Tuxtla Gutiérrez, Chiapas, Mexico, November 16–22, 2014 (Program Committee)
- 2014 7th IEEE Intelligent Systems'2014 Conference, Warsaw, Poland, September 24–26, 2014 (International Program Committee)
- 2014 16th GAMM–IMACS International Symposium on Scientific Computing, Computer Arithmetic and Validated Numerics SCAN'2014, Wuerzburg, Germany, September 21–26, 2014 (Scientific Committee)
- 2014 Third Brazilian Congress on Fuzzy Systems, Joao Pessoa, Brazil, August 17–20, 2014 (International Program Committee)
- 2014 International Conference on Information Processing and Management of Uncertainty in Knowledge-based Systems IPMU'2014, Montpellier, France, July 15–19, 2014 (Program Committee)
- 2014 Second International Conference on Vulnerability and Risk Analysis and Management ICVRAM'2014 and Sixth International Symposium on Uncertainty Modelling and Analysis ISUMA'2014, Liverpool, UK, July 13–16, 2014 (International Scientific Committee)
- 2014 2014 Joint Rough Set Symposium JRS'2014, a joint conference of the 9th International Conference on Rough Sets and Current Trends in Computing RSCTC'2014 and the 2nd International Conference on Rough Sets and Intelligent Systems Paradigms RSEISP'2014, Granada and Madrid, Spain, July 9–13, 2014 (Program Committee)
- 2014 IEEE International Conference on Fuzzy Systems FUZZ-IEEE'2014, Beijing, China, July 6–11, 2014 (Program Committee)

- 2014 6th Conference on Reliable Engineering Computing REC'2014 "Reliability and Computations of Infrastructures", Chicago, Illinois, May 25–28, 2014 (Program Committee)
- 2014 4th World Conference on Soft Computing, Berkeley, California, May 25–27, 2014 (Special Sessions co-Chair)
- 2014 Seventh International Conference of Thailand Econometric Society, Chiang Mai, Thailand, January 8–10, 2014 (Program Committee)
- 2013 3rd World Conference on Soft Computing, San Antonio, Texas, December 16–18, 2013 (Chair, Program Committee)
- 2013 5th International Conference on Soft Computing and Pattern Recognition 2013 SoCPaR'13, Hanoi, Vietnam, December 15–18, 2013 (International Advisory Committee)
- 2013 2013 International Conference on Fuzzy Theory and Its Applications iFuzzy'2013, Taipei, Taiwan, December 6–8, 2013 (International Advisory Committee)
- 2013 Fuzzy Systems and Probabilistic Models in Decision Making Track of the Mexican International Conference on Artificial Intelligence MICAI'2013, Mexico City, Mexico, November 24–30, 2013 (Program Committee)
- 2013 The Fifth International Conference on Knowledge and Systems Engineering KSE'2013, Hanoi, Vietnam, October 17–19, 2013 (Program Committee)
- 2013 The 8th conference of the European Society for Fuzzy Logic and Technology EUSFLAT'2013, Milan, Italy, September 11–13, 2013 (Program Committee)
- 2013 10th International Conference on Parallel Processing and Applied Mathematics PPAM'2013, Warsaw, Poland, September 8–11, 2013 (Program Committee)
- 2013 International Conference on Soft Computing, Computing with Words and Perceptions in System Analysis, Decision and Control ICSCCW'2013, Izmir, Turkey, September 2–3, 2013 (Organizing Committee)
- 2013 The 5th World Congress on Nature and Biologically Inspired Computing 2013 NaBIC'13, Fargo, North Dakota, August 12–14, 2013 (Program Committee)
- 2013 The Twenty Third International Joint Conference on Artificial Intelligence IJCAI'2013, Beijing, China, August 3–9, 2013 (Program Committee)
- 2013 Eighth International Symposium on Imprecise Probability: Theories and Applications ISIPTA'13, Compiègne, France, July 2–5, 2013 (Program Committee)
- 2013 2013 World Congress of the International Fuzzy Systems Association IFSA'2013, Edmonton, Canada, June 24–28, 2013 (Program Committee)

- 2013 IEEE International Conference on Cybernetics, Lausanne, Switzerland, June 13–15, 2013 (Program Committee)
- 2013 International Conference on Applied Statistics, Maha Sarakham, Thailand, May 14–17, 2013 (Program Committee)
- 2013 IEEE Symposium on Computational Intelligence for Engineering Solutions CIES’2013, Singapore, April 16–19, 2013 (Symposium Co-Chair)
- 2013 IEEE Symposium on Foundations of Computational Intelligence FoCI’2013, Singapore, April 16–19, 2013 (Program Committee)
- 2013 First International Symposium on Affective Engineering ISAE’2013, Kitakyushu, Japan, March 6–8, 2013 (Program Committee)
- 2013 Sixth International Conference of Thailand Econometric Society, Chiang Mai, Thailand, January 10–11, 2013 (Program Committee)
- 2012 Fourth International Conference on Soft Computing and Pattern Recognition SoC-PaR’2012, Brunei, December 10–13, 2012 (Program Committee)
- 2012 2nd World Conference On Soft Computing, Baku, Azerbaijan, December 3–5, 2012 (Co-Chair, Program Committee)
- 2012 4th World Congress on Nature and Biologically Inspired Computing NaBIC’2012, Mexico City, Mexico, November 5-9, 2012 (Program Committee)
- 2012 World Congress on Information and Communication Technologies WICT’2012, Trivandrum, India, October 30 – November 2, 2012 (Program Committee)
- 2012 15th GAMM–IMACS International Symposium on Scientific Computing, Computer Arithmetic and Validated Numerics SCAN’2012, Novosibirsk, Russia, September 24–28, 2012 (Scientific Committee)
- 2012 5th International Workshop on Constraint Programming and Decision Making Co-ProD’12, Novosibirsk, Russia, September 23, 2012 (Organizing Committee)
- 2012 4th International Conference on Intelligent Networking and Collaborative Systems INCoS’2012, Track on Fuzzy Systems and Knowledge Management, Bucharest, Romania, September 19–21, 2012 (Program Committee)
- 2012 6th International Conference on Scalable Uncertainty Management SUM’2012, Marburg, September 17–19, 2012 (Program Committee)
- 2012 IEEE 6th International Conference “Intelligent Systems” IEEE IS’12, Sofia, Bulgaria, September 6–8, 2012 (Program Committee)

- 2012 Tenth International Conference on Application of Fuzzy Systems and Soft Computing ICAFS'2012, Lisbon, Portugal, August 29–30, 2012 (Conference Co-Chair)
- 2012 The IEEE International Conference on Granular Computing GrC'2012, Hangzhou, China, August 11–13, 2012 (Advisory Board)
- 2012 31st International Conference of the North American Fuzzy Information Processing Society NAFIPS'12, Berkeley, California, August 6–8, 2012 (Special Sessions Chair)
- 2012 Special Track on Socially Inspired Complex Systems of The Sixth International Conference on Complex, Intelligent, and Software Intensive Systems CISIS'2012, Palermo, Italy, July 4–6, 2012 (Program Committee)
- 2012 IEEE International Conference on Fuzzy Systems FUZZ-IEEE'2012, Brisbane, Australia, June 10–15, 2012 (Technical Co-Chair, Organizing Committee)
- 2012 International Conference on Intelligent Interactive Multimedia Systems and Services KES-IIMSS'2012, Gifu, Japan, May 23–25, 2012 (Program Committee)
- 2012 American Society for Engineering Education (ASEE) Gulf Southwest Regional Conference, El Paso, Texas, April 4–6, 2012 (Organizing and Advisory Committee)
- 2012 Fifth Conference of Thailand Econometric Society, Chiang Mai, Thailand, January 12–13, 2012 (Program Committee)
- 2011 10th Mexican International Conference on Artificial Intelligence MICAI'2011, Puebla, Mexico, November 26 – December 4, 2011 (Program Committee)
- 2011 11th International Conference on Intelligent Systems Design and Applications ISDA'11, Cordoba, Spain, November 22–24, 2011 (Program Committee)
- 2011 International Symposium on Computational Intelligence and Design, Hangzhou, China, October 28–30, 2011 (Program Committee)
- 2011 3rd International Conference on Soft Computing and Pattern Recognition SoC-PaR'2011, Dalian, China, October 14–16, 2011 (Program Committee)
- 2011 International Conference on Scalable Uncertainty Management SUM'2011, Dayton, Ohio, October 10–12, 2011 (Program Committee)
- 2011 Dagstuhl Seminar on Uncertainty Modeling and Analysis with Intervals: Foundations, Tools, Applications, Dagstuhl, Germany, September 11–16, 2011 (co-organizer)
- 2011 International Conference on Soft Computing, Computing with Words and Perceptions in System Analysis, Decision, and Control ICSCCW'2011, Antalya, Turkey, September 1–2, 2011 (Conference Co-Chair)



- 2011 2011 International Conference on Intelligent Human-Machine Systems and Cybernetics IHMSC'2011, Hangzhou, China, August 27–28, 2011 (Program Committee)
- 2011 Eighth International Symposium on Management Engineering ISME'2011, Taipei, Taiwan, August 21–25, 2011 (Advisory Committee)
- 2011 International Conference on Natural Computation / International Conference on Fuzzy Systems and Knowledge Discovery ICNC-FSKD'2011, July 26-28, 2011, Shanghai, China (Program Committee)
- 2011 Seventh International Symposium on Imprecise Probability: Theories and Applications ISIPTA'11, Innsbruck, Austria, July 25–28, 2011 (Program Committee)
- 2011 The 7th conference of the European Society for Fuzzy Logic and Technology EUSFLAT'2011 and Les Rencontres Francophones sur la Logique Floue et ses Applications LFA'2011, Aix-Les-Bains, France, July 18–22, 2011 (Program Committee)
- 2011 The Twenty Second International Joint Conference on Artificial Intelligence IJCAI'2011, Barcelona, Spain, July 16–22, 2011 (Program Committee)
- 2011 IEEE International Conference on Fuzzy Systems FUZZ-IEEE'2011, Taipei, Taiwan, June 27–30, 2011 (Organizing Committee)
- 2011 International Fuzzy Systems Association and Asian Fuzzy Systems Symposium IFSA-AFSS'2011, Surabaya and Bali Island, Indonesia, June 21–25, 2011 (International Program Committee)
- 2011 World Congress on Soft Computing, San Francisco, California, May 23–25, 2011 (Program Committee)
- 2011 IEEE Symposium on Foundations of Computational Intelligence FOCI'11, Paris, France, April 11–15, 2011 (Program Committee)
- 2011 IEEE Symposium on Advances to Type-2 Fuzzy Logic T2-FUZZ'2011, Paris, France, April 11–15, 2011 (Program Committee)
- 2011 6th International Conference Sciences of Electronic, Technologies of Information and Telecommunications SETIT'2011, Sousse, Tunisia, March 23–26, 2011 (Program Committee)
- 2011 30th International Conference of the North American Fuzzy Information Processing Society NAFIPS'11, El Paso, Texas, March 18–20, 2011 (Conference Co-Chair)
- 2011 Eighth International Conference on Computability and Complexity in Analysis CCA'2011, Cape Town, South Africa January 31 – February 4, 2011 (Program Committee)

- 2010 The Eleventh International Conference on Intelligent Technologies InTech'10: Towards Creative Technology for the 21st Century, Bangkok, Thailand, December 14–16, 2010 (Co-Chair, Program Committee)
- 2010 Tenth International Conference on Intelligent Systems Design and Applications ISDA'2010, Cairo, Egypt, November 29 – December 1, 2010 (Technical Program Committee)
- 2010 9th Mexican International Conference on Artificial Intelligence, Pachuca, Mexico, November 8–13, 2010 (Program Committee)
- 2010 Brazilian Symposium on Artificial Intelligence SBIA'2010, Sao Paulo, Brazil, October 2010 (Program Committee)
- 2010 The International Symposium on Innovative Management, Information and Production, Hangzhou, China, October 9–11, 2010 (International Program Committee)
- 2010 3rd International Workshop on Constraint Programming and Decision Making Co-ProD'10, Lyon, France, September 30 – October 1, 2010 (Organizing Committee)
- 2010 14th GAMM–IMACS International Symposium on Scientific Computing, Computer Arithmetic and Validated Numerics SCAN'2010, Lyon, France, September 27–30, 2010 (Scientific Committee)
- 2010 Fourth International Conference on Scalable Uncertainty Management SUM'10, Toulouse, France, September 27–29, 2010 (Program Committee)
- 2010 International Conference on Machines, Computations, and Universality MCU'2010, Pittsburgh, Pennsylvania, September 21–25, 2010 (Program Committee)
- 2010 7th International Conference on Fuzzy Systems and Knowledge Discovery FSKD'10, Yantai, China, August 10–12, 2010 (Technical Program Committee)
- 2010 IEEE International Conference on Fuzzy Systems FUZZ-IEEE'2010, July 18–23, 2010, Barcelona, Spain (Special Session Chair)
- 2010 29th International Conference of the North American Fuzzy Information Processing Society NAFIPS'10, Toronto, Canada, July 12–14, 2010 (Program Committee)
- 2010 13th International Conference on Information Processing and Management of Uncertainty in Knowledge-Based Systems IPMU'2010, Dortmund, Germany, June 28 – July 2, 2010 (Program Committee)
- 2010 Seventh International Conference on Computability and Complexity in Analysis CCA'2010, Zhenjiang, China, June 21–25, 2010 (Program Committee)

- 2010 Third International Conference on E-Medical Systems E-MediSys'2010, Fez, Morocco, May 12–14, 2010 (Program Committee)
- 2010 International Symposium on Integrated Uncertainty Management and Applications, Japan Advanced Institute of Science and Technology, Ishikawa, Japan, April 9–11, 2010 (Program Committee)
- 2010 The Fourth International Workshop on Reliable Engineering Computing REC'2010, Singapore, March 3–5, 2010 (Program Committee)
- 2010 3rd Annual Econometric Conference, Chiang Mai, Thailand, January 7–8, 2010 (Scientific Program Committee)
- 2009 Tenth International Conference on Intelligent Technologies InTech'09, Guilin, China, December 12–15, 2009 (Co-Chair, Program Committee)
- 2009 8th Mexican International Conference on Artificial Intelligence MICAI'09, Guanajuata, Mexico, November 9–13, 2009 (Program Committee)
- 2009 International Conference on Intelligent Human-Machine Systems and Cybernetics IHMSC'09, Hangzhou, China, August 26–27, 2009 (Program Committee)
- 2009 World Congress of the International Fuzzy Systems Association IFSA'2009, Lisbon, Portugal, July 20–24, 2009 (International Program Committee)
- 2009 Sixth International Symposium on Imprecise Probability: Theories and Applications ISIPTA'09, Durham, England, UK, July 14–18, 2009 (Program Committee)
- 2009 Fourth International Conference on Rough Set and Knowledge Technology, Gold Coast, Australia, July 14–16, 2009 (Program Committee)
- 2009 2nd International Conference on Uncertainty in Structural Dynamics USD'09, Sheffield, England, UK, June 15–17, 2009 (Scientific Committee)
- 2009 International Joint Conference on Neural Networks IJCNN'2009, Atlanta, Georgia, June 14–19, 2009 (Program Committee)
- 2009 Annual International Conference of the North American Fuzzy Information Processing Society NAFIPS'09, Cincinnati, Ohio, June 14–17, 2009 (Co-Chair, Program Committee)
- 2009 IEEE Workshop on Hybrid Intelligent Models and Applications HIMA'09, Nashville, Tennessee, March 30 – April 2, 2009 (Program Committee)
- 2009 5th International Conference on Sciences of Electronic, Technologies of Information and Telecommunications SETIT'2009, Hammamet, Tunisia, March 22–26, 2009 (Program Committee)

- 2009 2nd International Conference on Finite Element Methods in Engineering and Science FEMTEC'2009, Lake Tahoe, California, January 5–9, 2009 (Scientific Committee)
- 2008 Workshop on Soft Computing in conjunction with the Tenth Pacific Rim International Conference on Artificial Intelligence PRICAI'08, Hanoi, Vietnam, December 15–19, 2008 (Program Committee)
- 2008 International Conference on E-Medical Systems E-Medisys'08, Sfar, Tunisia, October 29–31, 2008 (Program Committee)
- 2008 7th Mexican International Conference on Artificial Intelligence MICAI'08, Mexico City, Mexico, October 27–31, 2008 (Program Committee)
- 2008 International Multi-conference on Computer Science and Information Technology, Wisla, Poland, October 20–22, 2008 (Technical Program Committee)
- 2008 Ninth International Conference on Intelligent Technologies InTech'08, Samui, Thailand, October 7–9, 2008 (co-Chair, International Program Committee)
- 2008 1st International Conference on Security Technologies SecTech'08, Samui, Thailand, October 7–9, 2008 (International Program Committee)
- 2008 Mexican International Conference on Computer Science ENC'08, Mexicali, Baja California, Mexico, October 6–10, 2008 (Program Committee)
- 2008 13th GAMM-IMACS International Symposium on Scientific Computing, Computer Arithmetic, and Verified Numerical Computation SCAN'2008, El Paso, Texas, September 29 – October 3, 2008 (Scientific Committee)
- 2008 Soft Methods in Probability and Statistics SMPS'08, Toulouse, France, September 8–10, 2008 (Program Committee)
- 2008 Eighth International Conference on Application of Fuzzy Systems and Soft Computing ICAFS'2008, Helsinki, Finland, September 1–3, 2008 (Program Committee)
- 2008 1st Annual North American Simulation Technology Conference NASTEC'08, Montreal, Canada, August 13–15, 2008 (Program Committee)
- 2008 International Conference on Information Processing and Management of Uncertainty in Knowledge-Based Systems IPMU'08, Malaga, Spain, June 22–27, 2008 (Program Committee)
- 2008 IEEE International Conference on Fuzzy Systems FUZZ-IEEE'08, Hong Kong, China, June 1–6, 2008 (Program Committee)

- 2008 Annual International Conference of the North American Fuzzy Information Processing Society NAFIPS'08, New York City, May 18–21, 2008 (Co-Chair, Program Committee)
- 2008 3rd International Conference on Rough Sets and Knowledge Technology RSKT'08, Chengdu, China, May 17–19, 2008 (Program Committee)
- 2008 Twelfth International Conference on Intuitionistic Fuzzy Sets ICIFS'2008, Sofia, Bulgaria, May 17–18, 2008 (Program Committee)
- 2008 International Workshop on Interval/Probabilistic Uncertainty and Non-Classical Logics, Japan Advanced Institute of Science and Technology (JAIST), Nomi (near Kanazawa), Japan, March 25–28, 2008 (Program Committee)
- 2008 The 5th International Symposium on Management Engineering ISME'2008, Kitakyushu, Japan, March 15–17, 2008 (Program Committee)
- 2008 The Third International Workshop on Reliable Engineering Computing, Savannah, Georgia, February 20–22, 2008 (Program Committee)
- 2007 Eighth International Conference on Intelligent Technologies InTech'07, Sydney, Australia, December 12–14, 2007 (co-Chair, International Program Committee)
- 2007 The IEEE International Conference on Granular Computing GrC'2007, Silicon Valley, California, November 2–4, 2007 (Advisory Board)
- 2007 5th International Conference of European Society for Fuzzy Logic and Technology EUSFLAT'2007, Ostrava, Czech Republic, September 11–14, 2007 (Program Committee)
- 2007 Fourth International Conference on Soft Computing, Computing with Words and Perceptions in System Analysis, Decision and Control ICSCCW'2007, Antalya, Turkey, August 27–28, 2007 (International Program Committee)
- 2007 Third International Conference on Natural Computation ICNC'07, Haikou, China, August 24–27, 2007 (Program Committee)
- 2007 International Conference on Innovative Soft Computing and Its Applications ISCIA'2007, Malaysia, August 20–22, 2007 (International Program Committee)
- 2007 5th International Symposium on Imprecise Probabilities and Their Applications ISIPTA'07, Prague, Czech Republic, July 16–19, 2007 (Program Committee)
- 2007 Annual International Conference of the North American Fuzzy Information Processing Society NAFIPS'07, San Diego, California, June 24–27, 2007 (Technical Program Committee)

- 2007 World Congress of the International Fuzzy Systems Association IFSA'2007, Cancun, Mexico, June 18–21, 2007 (International Technical Committee)
- 2007 1st International Conference on Uncertainty in Structural Dynamics USD'2007, Sheffield, UK, June 11–13, 2007 (Scientific Committee)
- 2007 Joint Rough Sets Symposium JRS'07, Toronto, Canada, May 14–16, 2007 (Program Committee)
- 2007 1st Joint NMSU/UTEP Workshop on Mathematics and Computer Science, Las Cruces, New Mexico, April 14, 2007 (Organizing Committee)
- 2007 IEEE Symposium on Foundations of Computational Intelligence, Honolulu, Hawaii, April 1–5, 2007 (International Program Committee)
- 2007 4th International Conference Sciences of Electronic, Technologies of Information and Telecommunications SETIT'2007, Hammamet, Tunisia, March 25–29, 2007 (Program Committee)
- 2006 9th International Conference on Information Technology CIT'2006, Bhubaneswar, India, December 18–21, 2006 (Program Committee)
- 2006 Seventh International Conference on Intelligent Technologies InTech'06, Taipei, Taiwan, December 12–15, 2006 (co-Chair, International Program Committee)
- 2006 International Conference on Software, Knowledge, Information Management and Applications SKIMA'2006, Chiang Mai, Thailand, December 12–15, 2006 (International Program Committee)
- 2006 International Workshop on Finite Element Methods in Science and Engineering FEM'2006, El Paso, Texas, December 11–14, 2006 (Local Organizing Committee)
- 2006 International Symposium on Fuzzy and Rough Sets ISFUROS06, Santa Clara, Cuba, December 5–8, 2006 (Program Committee)
- 2006 The Fifth International Conference on Rough Sets and Current Trends in Computing RSCTC'2006, Kobe, Japan, November 6–8, 2006 (Program Committee)
- 2006 The 11th Conference Fuzzy Theory and Technology FTT'06, Kaohsiung, Taiwan, October 8–11, 2006 (Program Committee)
- 2006 12th GAMM-IMACS International Symposium on Scientific Computing, Computer Arithmetic, and Validated Numerics SCAN'2006, Duisburg, Germany, September 26–29, 2006 (Scientific Committee)
- 2006 11th Online World Conference on Soft Computing in Industrial Applications WSC11, September 18 – October 6, 2006 (Program Committee)

- 2006 9th Fuzzy Days – International Conference on Computational Intelligence, Dortmund, Germany, September 18–20, 2006 (Program Committee)
- 2006 First Thailand International Conference on 21st Century Information Technology in Mathematics Education, Chiang Mai, Thailand, September 17–20, 2006 (Organizing Committee)
- 2006 Soft Methods in Probability and Statistics SMPS’06, Bristol, UK, September 5–7, 2006 (Scientific Committee)
- 2006 13th Workshop on Logic, Language, Information and Computation WoLLIC’2006, Stanford, California, July 18–21, 2006 (Program Committee)
- 2006 IEEE International Conference on Fuzzy Systems FUZZ-IEEE’2006, Vancouver, Canada, July 16–21, 2006 (Program Committee)
- 2006 International Conference on Information Processing and Management of Uncertainty in Knowledge-Based Systems IPMU’06, Paris, France, July 2–7, 2006 (Program Committee)
- 2006 International Conference on Interval Analysis and Its Applications, Peterhof, St. Petersburg, Russia, July 1–4, 2006 (Program Committee)
- 2006 Second International Conference on Fuzzy Sets and Soft Computing in Economics and Finance FSSCEF’2006, St. Petersburg, Russia, June 28 – July 1, 2006 (Program Committee)
- 2006 International Forum “Product lifecycle management in informational environment of up-to-date enterprises” isiCAD’2006, Akademgorodok, Novosibirsk, Russia, May 29–30, 2006 (Program Committee)
- 2006 The Second Workshop on Reliable Engineering Computing, Savannah, Georgia, February 22–24, 2006 (Program Committee)
- 2005 Sixth International Conference on Intelligent Technologies InTech’05, Phuket, Thailand, December 14–16, 2005 (co-Chair, International Program Committee)
- 2005 International Conference on Machine Intelligence ACIDCA-ICMI’2005, Tozeur, Tunisia, November 5–7, 2005 (International Program Committee)
- 2005 The Berkeley Initiative in Soft Computing Special Event BISCSE’05 “Forging New Frontiers”, Berkeley, California, November 2–5, 2005 (International Advisory Committee)
- 2005 Richard Tapia Celebration of Diversity in Computing Conference, Albuquerque, New Mexico, October 19–22, 2005 (Program Committee)

- 2005 10th Online World Conference on Soft Computing in Industrial Applications WSC10, September 19 – October 7, 2005 (Program Committee)
- 2005 Second International Conference on Computability and Complexity in Analysis CCA'2005, Kyoto, Japan, August 26–29, 2005 (Program Committee)
- 2005 Bioinspired System and Brain-like Architecture Workshop BISBC'05, part of the Joint Conference in Information Sciences JCIS'2005, Salt Lake City, Utah, July 21–26, 2005 (Program Committee)
- 2005 4th International Symposium on Imprecise Probabilities and Their Applications ISIPTA'05, Pittsburgh, Pennsylvania, July 20–23, 2005 (Program Committee)
- 2005 Fourth International Conference on Information and Management Sciences IMS'2005, Kunming and Dali, China, July 1–8, 2005 (Program Committee)
- 2005 IEEE International Conference on Fuzzy Systems FUZZ-IEEE'2005, Reno, Nevada, May 22–25, 2005 (Program Committee)
- 2005 2005 Meeting of the Southwestern Section of the Mathematical Association of America (MAA), El Paso, Texas, April 1–2, 2005 (special session organizer)
- 2005 3rd International Conference Sciences of Electronic, Technologies of Information and Telecommunications SETIT'05, Susa, Tunisia, March 27–31, 2005 (Program Committee)
- 2005 Track on Reliable Computations and their Applications (RCA) at the 20th Annual ACM Symposium on Applied Computing SAC'05, Santa Fe, New Mexico, March 13–17, 2005 (Track co-Chair)
- 2004 International Conference on Information Technology CIT'2004, Hyderabad, India, December 20–23, 2004 (Program Committee)
- 2004 International Symposium on Computational Intelligent and Industrial Applications ISCIIA'2004, Haikou, China, December 20–22, 2004 (Program Committee)
- 2004 Asian Fuzzy Systems Society (AFSS) International Conference on Fuzzy Systems, Hanoi, Vietnam, December 14–16, 2004 (International Program Committee)
- 2004 Fifth International Conference on Intelligent Technologies InTech'04, Houston, Texas, December 2–4, 2004 (International Program Committee)
- 2004 Workshop on Deduction and Reasoning Techniques DRT'04, co-located with 9th Ibero-American Conference on Artificial Intelligence IBERAMIA'2004, November 22–23, 2004, Puebla, Mexico (International Program Committee)



- 2004 11th GAMM–IMACS International Symposium on Scientific Computing, Computer Arithmetic, and Validated Numerics SCAN’2004, Fukuoka, Japan, October 4–8, 2004 (Scientific Committee)
- 2004 Joint 2nd International Conference on Soft Computing and Intelligent Systems and 5th International Symposium on Advanced Intelligent Systems SCIS&ISIS’2004, Yokohama, Japan, September 21–24, 2004 (International Program Committee)
- 2004 2004 Second International Workshop on Web-based Support Systems WSS’2004, in conjunction with the 2004 IEEE/WIC/ACM International Conference on Web Intelligence WI’2004, Beijing, China, September 20, 2004 (Program Committee)
- 2004 Workshop on Reliable Engineering Computing REC’2004, Savannah, Georgia, September 15–17, 2004 (Program Committee)
- 2004 International Conference on Computability and Complexity in Analysis CCA’04, Lutherstadt-Wittenberg, Germany, August 16–20, 2004 (Program Committee)
- 2004 The Nineteenth National Conference on Artificial Intelligence AAAI’2004, San Jose, California, July 25–29, 2004 (Program Committee)
- 2004 International Workshop “Constraint-based Approaches and Methods of Mathematical Modelling for Intelligent CAD/CAM/CAE systems: From Methods to Applications” isiCAD’2004, Akademgorodok, Novosibirsk, Russia, June 22–24, 2004 (Program Committee)
- 2004 2nd International Workshop on Interval Mathematics and Constraint Propagation methods IMCP’04, Akademgorodok, Novosibirsk, Russia, June 21–24, 2004 (Program Committee)
- 2004 Fourth International Conference on Rough Sets and Current Trends in Computing RSCTC’2004, Uppsala, Sweden, June 1–4, 2004 (Program Committee)
- 2003 International Conference on Information Technology CIT’2003, Bhubaneswar, Orissa, India, December 22–25, 2003 (Program Committee)
- 2003 4th International Conference on Intelligent Technologies InTech’2003, Chiangmai, Thailand, December 17–19, 2003 (International Program Committee)
- 2003 Second International Joint Workshop on Soft Computing for Internet and Bioinformatics FLINT-CIBI’03, Berkeley, California, December 15–18, 2003 (International Advisory Committee)
- 2003 3rd International Conference on Optoinformatics, St. Petersburg, Russia, October 20–24, 2003 (Program Committee)
- 2003 Seventh International Conference on Intuitionistic Fuzzy Sets ICIFS’2003, Sofia, Bulgaria, August 23–24, 2003 (Program Committee)

- 2003 Annual International Conference of the North American Fuzzy Information Processing Society NAFIPS'2003, Chicago, Illinois, July 24–26, 2003 (session co-organizer)
- 2003 IEEE International Conference on Fuzzy Systems FUZZ-IEEE'2003, St. Louis, Missouri, May 25–28, 2003 (program committee).
- 2003 Mini-Symposia on Geoinformatics: Creating Cyberinfrastructure for the Geosciences at SIAM Conference on Mathematical and Computational Issues in the Geosciences, Austin, Texas, March 17–20, 2003 (co-organizer).
- 2002 International Conference on Information Technology CIT'02, Bhubaneswar, India, December 21–24, 2002 (program committee).
- 2002 Joint 3rd International Conference on Intelligent Technologies and 3rd Vietnam-Japan Symposium on Fuzzy Systems and Applications InTech/VJFUZZY'2002 Hanoi, Vietnam, December 3–5, 2002 (International Program Committee)
- 2002 10th GAMM-IMACS International Symposium on Scientific Computing, Computer Arithmetic, and Validated Numerics SCAN'2002, Paris, France, September 23–27, 2002 (scientific committee)
- 2002 Second International Workshop on Intelligent Systems Design and Applications ISDA'02, in conjunction with the Second International Conference on Neural, Parallel and Scientific Computations NSPC'02, Atlanta, Georgia, August 7–8, 2002 (technical committee).
- 2002 10th Mediterranean Conference on Control and Automation MED'2002, Lisbon, Portugal, July 9–13, 2002 (session co-organizer)
- 2002 Annual International Conference of the North American Fuzzy Information Processing Society NAFIPS-FLINT 2002, Fuzzy Logic and Internet (FLINT), New Orleans, Louisiana, June 27–29, 2002 (international advisory committee)
- 2002 Validated Computing 2002, SIAM Workshop, Toronto, Canada, May 23–25, 2002 (organizing committee)
- 2001 International Conference on Information Technology ICIT'2001, Gopalpur-on-Sea, Orissa, India, December 20–22, 2001 (program committee)
- 2001 Second Vietnam-Japan Bilateral Symposium on Fuzzy Systems and Applications VJFUZZY'2001, Hanoi, Vietnam, December 7–8, 2001 (International Advisory Committee)
- 2001 IEEE International Conference on Fuzzy Systems, Melbourne, Australia, December 2001 (technical program committee)

- 2001 Fifth International Conference on Intuitionistic Fuzzy Sets ICIFS'2001, Sofia, September 22–23, 2001 (program committee)
- 2001 Workshop on Granular Computing GrC'2001, Bangor, Wales, U.K., June 19–22, 2001 (international program committee)
- 2001 Symposium on Fuzzy Logic and its Applications FLA'2001, Bangor, Wales, U.K., June 19–22, 2001 (international program committee)
- 2000 International Conference on Information Technology ICIT'2000, Bhubaneswar, India, December 21–23, 2000 (program committee)
- 2000 International Conference on Intelligent Technologies, Bangkok, Thailand, December 13–15, 2000 (program committee; publicity co-chair)
- 2000 International Conference on Soft Computing IIZUKA'2000, Iizuka city, Fukuoka, Japan, October 1–4, 2000 (program committee)
- 2000 9th GAMM - IMACS International Symposium on Scientific Computing, Computer Arithmetic, and Validated Numerics SCAN'2000, Karlsruhe, Germany, September 19–22, 2000 (international steering committee)
- 2000 Second International Discourse “With Fuzzy Logic in the New Millenium”, Mackay, Great Barrier Reef, Australia, September 18–21, 2000 (program committee)
- 2000 Fourth International Conference on Intuitionistic Fuzzy Sets ICIFS'2000, Sofia, September 16–17, 2000 (program committee)
- 2000 Annual International Conference of the North American Information Processing Society NAFIPS'00, Atlanta, Georgia, July 13–15, 2000 (program committee)
- 2000 6th International Conference on Applications of Computer Algebra IMACS-ACA'2000, St. Petersburg, Russia, June 25–28, 2000 (session co-organizer)
- 2000 Integrated Design and Process Technology Conference, Section on Process and Software Specification, Dallas, TX, June 4–8, 2000 (program committee)
- 2000 IEEE International Conference on Fuzzy Systems, San Antonio, Texas, May 7–10, 2000 (program committee; publicity chair)
- 1999 International Conference on Information Technology ICIT'99, Bhubaneswar, India, December 20–22, 1999 (program committee)
- 1999 Third International Conference on Intuitionistic Fuzzy Sets ICIFS'99, Sofia, Bulgaria, October 16–17, 1999 (program committee)

- 1999 14th IEEE International Symposium on Intelligent Control/Intelligent Systems and Semiotics ISIC/ISAS'99, Cambridge, Massachusetts, September 15-17, 1999 (session chair)
- 1999 International Symposium on Medical Informatics and Fuzzy Technology, MIF'99, Hanoi, Vietnam, August 27-29, 1999 (program committee)
- 1999 Annual International Conference of the North American Information Processing Society NAFIPS'99, New York, New York, June 10-12, 1999 (program committee)
- 1999 SIAM Mini-Symposium on Possible Future Directions in Applications of Interval Computations, Atlanta, Georgia, May 12-15, 1999 (co-organizer).
- 1999 Workshop on Applications of Interval Analysis to Systems and Control with special emphasis on recent advances in Modal Interval Analysis MISC'99, Girona, Spain, February 24-26, 1999 (program committee)
- 1998 Second Seminar in Medical Informatics (SMI'97), Hanoi, Vietnam, December 28-29, 1998 (program committee)
- 1998 Vietnam-Japan Workshop on Fuzzy Logic for Technology VJFUZZY'98, September 30-October 2, 1998, HaLong Bay, Vietnam (International Advisory Committee)
- 1998 A Joint Conference on the Science and Technology of Intelligent Systems STIS'98:
- IEEE International Symposium on Intelligent Control (ISIC);
  - International Symposium on Computational Intelligence in Robotics and Automation (CIRA), and
  - Intelligent Systems and Semiotics (ISAS),
- Gaithersburg, MD, September 14-17, 1998 (program committee)
- 1998 International Symposium on Scientific Computing, Computer Arithmetic, and Validated Numerics SCAN'98, Budapest, Hungary, September 1998 (scientific committee)
- 1998 Annual International Conference of the North American Information Processing Society NAFIPS'98, Pensacola Beach, Florida, August 20-21, 1998, (program committee).
- 1998 SIAM Mini-Symposium Applications of Interval Computations, Toronto, Canada, July 13-17, 1998 (co-organizer)
- 1998 Interval'98: International Conference on Interval Methods and their Application in Global Optimization, Nanjing, China, April 20-23, 1998 (program committee)

- 1998 Mexican Expert Systems Interval Conference (MEXICON'98), Workshop on Interval Computations and its Applications to Reasoning Under Uncertainty, Knowledge Representation, and Control Theory (in conjunction with the 4th World Congress on Expert Systems) Mexico City, Mexico, March 16–20, 1998 (scientific committee)
- 1997 International Workshop on Intelligent Non-Destructive Evaluation (NDE) Sciences for Aging and Futuristic Aircraft, El Paso, TX, September 30–October 2, 1997 (session co-chair)
- 1997 International Conference on Intelligent Systems and Semiotics (ISAS'97), September 22–25, 1997, Gaithersburg, MD (program committee).
- 1997 First Seminar in Medical Informatics (SMI'97), Hanoi, Vietnam, September 23–24, 1997 (program committee)
- 1997 SCAN-97: GAMM/IMACS International Symposium on Scientific Computing, Computer Arithmetic and Validated Numerics, Lyon, France, September 10–12, 1997 (scientific committee)
- 1997 IEEE International Conference on Fuzzy Systems, Barcelona, Spain, July 1–5, 1997 (program committee)
- 1997 International Workshop on Computational Science and Engineering, Hefei, China, May 27–28, 1997 (member of the International Advisory Committee).
- 1997 Combined Workshops on Computational Complexity and Interval Computations (in conjunction with ACM Symposium on Theory of Computing STOC'97), May 6–8, 1997, El Paso, TX (co-organizer)
- 1997 ACM Symposium on Theory of Computing STOC'97, El Paso, Texas, May 4–6, 1997, (member, local organizing committee).
- 1997 NASA University Research Centers Conference, Albuquerque, NM, February 16–19, 1997 (member, program committee; session chair).
- 1996 9th International Symposium on Artificial Intelligence/6th International Conference on Industrial Fuzzy Control and Intelligent Systems, ISAI/IFIS 96, Cancun, Mexico, November 12–15, 1996 (sponsored by the IJCAI and AAAI) (program committee).
- 1996 Second SC COSMIC (South and Central Computational Science in Minority Institutions Consortium) Student Conference on Computational Science, El Paso, TX, October 25–27, 1996 (chairman, program committee)
- 1996 WAI'96: II Workshop on Computer Arithmetic, Interval Methods, and Symbolic Computation, Recife, Brazil, August 7–8, 1996 (program committee).

- 1996 SIAM Mini-Symposium Verification Theory, Techniques and Software: Components of Modern Reliable Scientific Computing, Kansas City, July 22–26, 1996 (co-organizer).
- 1996 Annual International Conference of the North American Information Processing Society NAFIPS'96, Berkeley, California, June 20–22, 1996 (program committee).
- 1996 Workshop on Interval Techniques in Computing, Modelling, Simulation and Optimization (part of IASTED International Conference Modeling, Simulation and Optimisation), Gold Coast, Australia, May 5, 1996 (advisory panel).
- 1996 International Discourse on Fuzzy Logic and The Management of Complexity, Sydney, Australia, January 1996 (program committee).
- 1995 Theories of Logic Programming, Non-Monotonic Reasoning, and their application to reasoning about Actions: The first Shell Oil Symposium, in honor of Michael Gelfond's 50th birthday, El Paso, TX, November 1995 (co-organizer)
- 1995 SONIC'95: Student Mini-Symposium On Interval Computations (SONIC'95), Houston, Texas, October 21–22, 1995 (chair, program committee)
- 1995 Applications of Interval Computations. International Workshop, El Paso, TX, February 1995 (chair, organizing committee).
- 1995 First SC COSMIC (South and Central Computational Science in Minority Institutions Consortium) Student Conference on Computational Science, Houston, TX, October 21–22, 1995 (member, program committee)
- 1994 NAFIPS/IFIS/NASA'94, San Antonio, TX, December 1994 (program committee; section chair).
- 1993 Third International Conference on Fuzzy Theory and Technology, November 1993 (program committee).
- 1993 Third International Conference on Industrial Fuzzy Control and Intelligent Systems, Houston, TX, December 1993 (panel chair).
- 1993 Second International Conference on Fuzzy Theory and Technology, October 1993 (program committee).
- 1993 5th University of Brunswick Artificial Intelligence Symposium, August 1993 (program committee).
- 1993 International Conference on Numerical Analysis with Automatic Results Verification, Lafayette, LA, February–March 1993 (program committee)
- 1993 Workshop on Interval Methods in Artificial Intelligence, Lafayette, LA, March–February 1993 (program committee).

1991 University of New Brunswick 4th Artificial Intelligence Workshop, 1991, (member of the Program Committee)

**Refereeing for Journals:**

2010–11 *ACM Transactions on Computational Logic*

2000–01 *ACM Transactions on Mathematical Software*

2019 *Acta Cybernetica*

2010–11 *Advances in Fuzzy Systems*

1996 *American Mathematical Monthly*

1996–present *Annals of Mathematics and Artificial Intelligence*

2010 *Annals of Operations Research*

2005 *Applications of Mathematics*

2008 *Applied Mathematical Modelling*

2011 *Applied Mathematics and Information Science*

2015 *Applied Soft Computing*

2008 *Artificial Intelligence Journal*

2018–now *Asian Journal of Economics and Banking*

1999 *Automatica*

2017 *Autosoft*

2003, 2007, 2010-11 *BIT*

2005 *Bulletin of the Malaysian Mathematical Sciences Society*

2009 *Central European Journal of Physics*

2010–11 *Chiang Mai Journal of Science*

2005 *Computational and Applied Mathematics*

2005 *Computational Statistics*

1999 *The Computer Journal*

2008 *Computer Methods in Applied Mechanics and Engineering*

1994–96 *Computers & Electrical Engineering*

1999–present *Computers & Mathematics with Applications*

2007 *Control and Cybernetics*

2003 *Cubo Matematica Educational*

2005, 2008 *Decision Support Systems*

2000–01 *Entropy*

2003 *Environmental Management*

2014 *Eurasian Mathematical Journal*

2003–04, 2006 *European Journal of Operational Research*

2006, 2015 *Fixed Point Theory and Applications*

2004 *Fundamenta Informaticae*

1999–present *Fuzzy Sets & Systems*

2005 *IEEE Transactions on Automatic Control*

2006 *IEEE Transactions on Biomedical Engineering*

1999 *IEEE Transactions on Circuits and Systems*

2005–06 *IEEE Transactions on Computers*

1992–present *IEEE Transactions on Fuzzy Systems*

1992–96, 2004, 2008–09, 2013–14 *IEEE Transactions on Neural Networks*

1999–present *IEEE Transactions on Systems, Man, and Cybernetics*

2006 *Indian Journal of Mathematics*



2012 *Information Fusion*

1999 *Information Processing Letters*

1999–present *Information Sciences*

2008 *International Journal of Applied Mathematics and Computer Science*

1990–present *International Journal of Approximate Reasoning*

1992–93 *International Journal of Artificial Intelligence Tools*

2005–06 *International Journal of Computational Intelligence Research*

2019 *International Journal of Computing*

2009, 2012 *International Journal of Control, Automation, and Systems*

2000–present *International Journal of General Systems*

2006 *International Journal of Information Technology & Decision Making*

1993–present *International Journal of Intelligent Systems*

2007 *International Journal of Intelligent Technologies and Applied Statistics*

2012 *International Journal of Math and Math Sciences*

2007–08, 2010 *International Journal of Reliability and Safety (IJRS)*

1992–97, 2005 *International Journal of Software Engineering and Knowledge Engineering*

2004 *International Journal of Systems Science*

1997–present *International Journal of Uncertainty, Fuzziness, and Knowledge-Based Systems (IJUFKS)*

1993–94 *Interval Computations*

2005 *Journal of Advanced Computational Intelligence & Intelligent Informatics (JACIII)*

2010 *Journal of Advances in Information Fusion*

2005 *Journal of Applied Analysis*

2003–04 *Journal of Applied Logic*

2001 *Journal of Applied Mathematics*

2010–11 *Journal of Engineering Mechanics*

1991–92 *Journal of Experimental and Theoretical Artificial Intelligence*

2006, 2009 *Journal of Global Optimization*

1992-present *Journal of Intelligent and Fuzzy Systems*

2003 *Journal of Logic and Algebraic Programming*

1992–96 *Journal of Logic and Computation*

1996–98 *Journal of Logic Programming*

2012 *Journal of Mechanical Design*

2002–03 *Journal of Reliability Engineering and System Safety*

1996 *Journal of Symbolic Logic*

1992, 2001 *Journal of Systems and Software*

1997 *Journal of Universal Computer Science*

2017 *Kairos, Journal of Philosophy & Science*

2001, 2012 *Knowledge and Information Systems*

2003, 2006, 2009 *Linear Algebra and Its Applications*

1998, 2004 *Logic Journal of the Interest Group in Pure and Applied Logic (IGPL)*

2018 *Mathematics*

2015 *Matematički Vesnik*

2002–04, 2006 *Mathematical and Computer Modelling*

2011–12 *Mechanical Systems and Signal Processing*

2009 *Neural Network World*

2015 *Neural Networks*

1993–96 *Neural, Parallel, and Scientific Computations. Intl. Journal*

2000 *Publicationes Mathematicae Debrecen*

1995–present *Reliable Computing*

2005 *Reviews in Mathematical Physics*

2001 *SIAM Journal on Computing (SICOMP)*

2005, 2011–12 *SIAM Journal on Matrix Analysis and Applications (SIMAX)*

2004–05 *Siberian Journal of Computational Mathematics*

1991–96 *SIGART Bulletin*

2002, 2007, 2009 *Soft Computing*

2013 *Structural and Multidisciplinary Optimization*

2001–04 *Studia Logica*

2010–11 *Symmetry*

2009–11, 2018 *Thailand Statistician*

2011 *Theoretical and Mathematical Physics*

2004, 2012 *Theoretical Computer Science*

2019 *Transactions of Mathematical Software*

2017 *Vestnik St. Petersburg University*

2000 *Vietnam Journal of Mathematics*

1974–89, 2003 *Zapiski: Proceedings of the St. Petersburg Mathematical Institute of the Russian Academy of Sciences*

1986–89 *Mathematics of the USSR. Izvestiya*

1986–89 *Measuring Techniques,*

1978–89 *Siberian Mathematical Journal*

### Refereeing for Review Journals

A reviewer for *Computing Reviews*, *Mathematical Reviews* and *Zentralblatt fur Mathematik*; up to 1989 a reviewer of Soviet review journals *RZhMatematika* and *New Foreign Books*. Total number of published reviews more than 200 (> 150 in *Mathematical Reviews*); in 1986 awarded a “Reviewer Excellence” award from the Computing Reviews.

### Refereeing Books

1995 J. Yen et al (eds.), *Industrial Applications of Fuzzy Logic and Intelligent Systems*, IEEE Press, 1995.

### Refereeing for Publishers

CRC Press, IEEE Press, Imperial College Press, Kluwer Academic Publishers, Springer Verlag, World Scientific

### Refereeing for Conferences (in addition to conferences where V. Kreinovich served on the program committee)

- 2018 Workshop on Engineering Applications WEA’2018, Medellin, Colombia, October 17–19, 2018
- 2018 The 2018 IEEE International Conference on Systems, Man, and Cybernetics IEEE SMC’2018, Miyazaki, Japan, October 7–10, 2018
- 2018 13th International Conference on Data Science and Knowledge Engineering for Sensing Decision Support, Belfast, Northern Ireland, UK, August 21–24, 2018
- 2017 Workshop on Engineering Applications WEA’2017, Cartagena, Colombia, September 27–29, 2017
- 2017 International Joint Conference on Neural Networks IJCNN’2017, Anchorage, Alaska, May 14–19, 2017
- 2016 International Conference of Numerical Analysis and Applied Mathematics IC-NAAM’2016, Rhodes, Greece, September 19–25, 2016
- 2016 23rd Workshop on Logic, Language, Information and Computation WoLLIC’2016, Puebla, Mexico, August 16–19, 2016
- 2016 International Conference on Applied Statistics ICAS’2016, Phuket, Thailand, July 13–15, 2016
- 2016 11th IEEE Systems of Systems Engineering SoSE’2016, Kongsberg, Norway, June 12–16, 2016

- 2015 MatTriad'2015, Coimbra, Portugal, September 7–11, 2015
- 2015 Twelfth International Conference on Computability and Complexity in Analysis CCA'2015, Tokyo, Japan, July 12–15, 2015
- 2014 2014 IEEE Congress on Evolutionary Computation CEC'2014, Beijing, China, July 16–19, 2014
- 2014 Joint International Conference on Engineering Education and International Conference on Information Technology ICEE/ICIT'2014, Riga, Latvia, June 2–6, 2014
- 2012 World Automation Congress WAC'2012, Puerto Vallarta, Mexico, June 24–28, 2012
- 2012 IEEE Workshop on Engineering Applications WEA'2012, Bogota, Colombia, May 2–4, 2012
- 2011 9th International Conference on Parallel Processing and Applied Mathematics PPAM'2011, Torun, Poland, September 11–14, 2011
- 2011 International Conference on Nonlinear Mathematics for Uncertainty and Applications NLMUA'2011, Beijing, China, September 7–9, 2011
- 2011 The 8th Ershov Informatics Conference PSI'2011, Novosibirsk, Russia, June 27 – July 1, 2011
- 2010 49th IEEE Conference on Decision and Control CDC'10, Atlanta, GA, December 15–17, 2010
- 2010 10th International Workshop on State-of-the-Art in Scientific and Parallel Computing PARA'2010, Reykjavik, Iceland, June 6–9, 2010
- 2009 10th International Conference on Structural Safety and Reliability ICOSSAR'2009, Osaka, Japan, September 13–17, 2009
- 2008 13th International Conference on Fuzzy Theory and Technology FT&T'08, Shenzhen, China, December 15–20, 2008
- 2008 24th International Conference on Logic Programming ICLP'2008, Udine, Italy, December 9–13, 2008
- 2008 Sixth EUROMECH Nonlinear Dynamics Conference, St. Petersburg, Russia, June 30 – July 4, 2008
- 2008 Minisymposium on High Performance Computing Interval Methods Trondheim, Norway, May 13–16, 2008

- 2007 International Conference of Numerical Analysis and Applied Mathematics IC-NAAM'2007, Corfu, Greece, September 16–20, 2007
- 2007 9th IFAC Workshop Adaptation and Learning in Control and Signal Processing ALCOSP'07, St. Petersburg, Russia, August 29–31, 2007
- 2007 2007 International Joint Conference on Neural Networks IJCNN'2007, Orlando, Florida, August 12–17, 2007
- 2007 International Symposium on Computational Aesthetics in Graphics, Visualization, and Imaging CAe'07, Banff, Alberta, Canada, June 20–22, 2007
- 2006 36th Annual Frontiers in Education Conference FIE'06, San Diego, California, October 28–31, 2006
- 2006 Special session on Uncertain/Control Systems and Reliable Numerics at the 6th International Conference on Numerical Methods and Applications NM&A'06, Borovets, Bulgaria, August 20–24, 2006
- 2006 2006 International Joint Conference on Neural Networks IJCNN'2006, Vancouver, Canada, July 16–21, 2006
- 2006 21st National Conference on Artificial Intelligence AAAI'06, Boston, Massachusetts, July 16–20, 2006
- 2006 29th Australasian Computer Science Conference ACSC'2006, Hobart, Tasmania, Australia, January 16–19, 2006
- 2005 Joint 4th Conference of the European Society for Fuzzy Logic and Technology (EUSFLAT) and 11th Rencontres Francophones sur la Logique Floue et ses Applications (LFA) EUSFLAT-LFA'2005, Barcelona, Spain, September 7–9, 2005
- 2005 28th Australasian Computer Science Conference ACSC'2005, Newcastle, New South Wales, Australia, January 31–February 3, 2005.
- 2004 9th Ibero-American Conference on Artificial Intelligence IBERAMIA'2004, Puebla, Mexico, November 22–26, 2004.
- 2004 WSEAS International Conference on Signal, Speech, and Image Processing ICOS-SIP, Izmir, Turkey, September 14–16, 2004.
- 2004 IEEE International Conference on Fuzzy Systems FUZZ-IEEE'2004, Budapest, Hungary, July 25–29, 2004.
- 2004 2004 International Joint Conference on Neural Networks IJCNN'2004, Budapest, Hungary, July 25–29, 2004.

- 2004 11th International Conference on Information Processing and Management of Uncertainty in Knowledge-Based Systems IPMU'2004, Perugia, Italy, July 4–9, 2004.
- 2003 28th International Symposium on Mathematical Foundations of Computer Science MFCS'2003, Bratislava, Slovakia, August 25–29, 2003
- 2003 2003 International Joint Conference on Neural Networks, Portland, Oregon, July 20–24, 2003
- 2003 20th International Symposium on Theoretical Aspects of Computer Science STACS'2003, Berlin, February 27 – March 1, 2003.
- 2003 Dagstuhl Seminar 3041 on Numerical Software with Result Verification, Dagstuhl, Germany, January 19–24, 2003.
- 2002 9th International Conference on Information Processing and Management of Uncertainty in Knowledge-Based Systems IPMU'2002, Annecy, France, July 1–5, 2002.
- 2002 IEEE International Conference on Fuzzy Systems FUZZ-IEEE'2002, Honolulu, Hawaii, May 12–17, 2002.
- 2001 31st Annual Frontiers in Education Conference FIE-2001, Reno, Nevada, October 10–13, 2001.
- 2000 AAI Symposium on Answer Set Programming: Towards Efficient and Scalable Knowledge Representation and Reasoning, Stanford, CA, March 26–28, 2001.
- 2000 Mexican International Conference on Artificial Intelligence MICAI'2000, Mexico City, Mexico, April 10–14, 2000.
- 1999 38<sup>th</sup> IEEE Conference on Decision and Control CDC'99, Phoenix, Arizona, December 7–10, 1999.
- 1999 Workshop on Applications of Interval Analysis to Systems and Control with special emphasis on recent advances in Modal Interval Analysis MISC'99, Girona, Spain, February 24–26, 1999.
- 1998 Mexican Expert Systems Interval Conference (MEXICON'98), Workshop on Interval Computations and its Applications to Reasoning Under Uncertainty, Knowledge Representation, and Control Theory (in conjunction with the 4th World Congress on Expert Systems) Mexico City, Mexico, March 16–20, 1998.
- 1997 SCAN-97: GAMM/IMACS International Symposium on Scientific Computing, Computer Arithmetic and Validated Numerics, Lyon, France, September 10–12, 1997.
- 1997 International Joint Conferences in Artificial Intelligence IJCAI'97, Nagoya, Japan, August 23–29, 1997.

- 1997 IEEE International Conference on Fuzzy Systems, Barcelona, Spain, July 1–5, 1997.
- 1996 9th International Symposium on Artificial Intelligence/6th International Conference on Industrial Fuzzy Control and Intelligent Systems, ISAI/IFIS 96, Cancun, Mexico, November 12–15, 1996.
- 1996 JELIA'96 – Joint European Workshop on Logic in Artificial Intelligence, Evora, Portugal, September 30 – October 3, 1996.
- 1996 JICSLP'96 – Joint International Conference and Symposium on Logic Programming, Bonn, Germany, September 2–6, 1996.
- 1996 International Conference on Parallel and Distributed Processing Techniques and Applications (PDPTA'96), August 9–11, 1996, Sunnyvale, CA.
- 1995 Applications of Interval Computations. International Workshop, El Paso, TX, February 1995.
- 1995 Theories of Logic Programming, Non-Monotonic Reasoning, and their application to reasoning about Actions: The first Shell Oil Symposium, in honor of Michael Gelfond's 50th birthday, November 1995 (refereeing for the proceedings)
- 1993 IMACS-GAMM Intl. Workshop on Validated Computations, Oldenburg, Germany, August–September 1993 (refereeing for the Proceedings).
- 1993 5th International Conference on Tools with Artificial Intelligence, November 1993
- 1993 International Joint Conference on Artificial Intelligence IJCAI-93.
- 1992 North American Fuzzy Information Processing Society conference (NAFIPS'92), Puerto Vallarta, Mexico
- 1992 4th International Conference on Tools with Artificial Intelligence, November 1992
- 1992 Eighth Conference on Uncertainty in Artificial Intelligence, Stanford, CA, 1992
- 1992 International Fuzzy Systems and Intelligent Control Conference 92, Louisville, KY
- 1992 4th International Conference on Software Engineering and Knowledge Engineering, 1992
- 1991 7th Conference on Uncertainty in Artificial Intelligence, University of California at Los Angeles, 1991

### **Refereeing for Granting Agencies**



2001, 2004–05, 2009–10 National Science Foundation (NSF)

2019 Mitacs Canada

2006, 2010–12, 2018 National Science and Engineering Research Council of Canada (NSERC)

2017 Chilean National Science and Technology Commission (CONICYT)

2009, 2016 Canada Research Chairs (CRC)

2015 Swiss National Science Foundation (SNSF)

2014 Swedish Scientific Foundation

2013 South Africa’s National Research Foundation (NRF)

2009, 2012 Netherlands Organisation for Scientific Research (NWO)

2005–08, 2010-11 Czech Science Foundations (formerly Grant Agency, Academy of Sciences of the Czech Republic)

2010 Swedish National Space Board (SNSB)

2010 US Department of Energy Office of Science

2003–04, 2009 Portuguese National Science Foundation (FCT)

2004–05, 2008–10 U.S. Civilian Research and Development Foundation (CRDF)

2007 Vienna Science and Technology Fund, Austria

2006 Ohio Supercomputer Center

2003–04 NASA

2004 Research Committee, City University of Hong Kong

2003 European Science Foundation (ESF)

2002 South African National Research Foundation (NRF)

2000 Science Foundation Ireland

1999 Israel Science Foundation

1993 International Science Foundation

1993 American Mathematical Society, Committee on Financial Support for former Soviet mathematicians