



Irina Khutsishvili

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Work Experience:

- 2010- to present - Ivane Javakhishvili Tbilisi State University, Department of Computer Sciences, Associate Professor
- 2006 – 2010 - Ivane Javakhishvili Tbilisi State University, Department of Computer Sciences, Assistant Professor
- 2000-2006 - Ivane Javakhishvili Tbilisi State University, Faculty of Computer Software and Information Technologies, Senior Teacher
- 1996-2000 - Ivane Javakhishvili Tbilisi State University, Faculty of Computer Technologies, Laboratory Senior Assistant
- 1974-1996 - Ivane Javakhishvili Tbilisi State University, Laboratory of the Physical Cybernetics, the Engineer-Mathematician- Programmer

Education:

- 2006 PhD, The Degree of a Candidate of Physics & Mathematics 05.13.11 Sciences - Mathematical maintenance and the software of computers, systems, complexes and networks, N. Muskhelishvili Institute of Computing Mathematics of Georgian Academy of Sciences
- 1977 University Diploma in Applied Mathematics (Mathematical support for automated control systems), Ivane Javakhishvili Tbilisi State University

Teaching Courses:

Basics of Programming (C++); Object Oriented Programming 1 (C++); Comparative Study of Programming Languages; Basics of Programming (C); STL: Containers and Universal Algorithms; Practical classes and labs with the following Programming Languages: Assembler, Pascal, Delphi, Visual C++; Databases designing; Local Networks and Internet; Introduction to Algorithms Theory; Mathematical basics of decision-making; Software Technologies for Expert Systems developing.

Research Interests:

Decision Support Systems - design, mathematical modeling and software development issues, Soft-computing methodologies in investment project management, Fuzzy methodologies in intelligent decision support systems, Fuzzy approach in multi-criteria (multi-attribute) group decision-making problems, Fuzzy aggregation operators in decision making and expert knowledge engineering, Programming techniques and modern Programming Languages, Algorithms, Optimization methods.

Performed Projects:

1. 2012 – 2015, SRNSF – Shota Rustaveli National Science Foundation, project #13/03, “The search for the signals of the new physics at ATLAS experiment”, Basic Research Staff - Programming, Data Analysis.
2. 2013 – 2016, SRNSF – Shota Rustaveli National Science Foundation, project # 31/44, “Study of New Physics Effects in the FCNC Inspired Processes at LHC ATLAS”, Basic Research Staff - Programming, Data Analysis.
3. 2013-2014, SRNSF – Shota Rustaveli National Science Foundation, project code DO/140/4-102/13, “Decision making aggregation operators and schemes in fuzzy uncertainty environment”, Supervisor of the Phd Student.

4. 2015–2016, ISTC – The International Science and Technology Center, project # G-2098, “The Search for and Study of New Physics Beyond the Standard Model at ATLAS Experiment of Large Hadron Collider (RUN2) at CERN”, Basic Research Staff - Programming, Data Analysis.

Selected Publications:

1. Gia Sirbiladze, Irina Khutsishvili, Otar Badagadze, Gvantsa Tsulaia, Associated Probability Intuitionistic Fuzzy weighted Operators in Business Start-up Decision Making, Iranian Journal of Fuzzy Systems, Articles in Press, DOI: 10.22111/ijfs.2017.3427.
2. Gia Sirbiladze, Irina Khutsishvili, Otar Badagadze, Mikheil Kapanadze, More Precise Decision-Making Methodology in the Temporalized Body of Evidence. Application in the Information Technology Management, International Journal of Information Technology & Decision Making, Vol. 15, No. 6 (2016): pp. 1469-1502.
3. Gia Sirbiladze, Irina Khutsishvili, Otar Badagadze, New Fuzzy Probabilistic Aggregation Operator in the Information System Implementation Management Problem, Bulletin of the Georgian National Academy of Sciences, Vol. 10, No. 2 (2016): pp. 59-66.
4. Gia Sirbiladze, Koba Gelashvili, Irina Khutsishvili, Anna Sikharulidze, Temporalized Structure of Bodies of Evidence in the Multi-Criteria Decision-Making Model, International Journal of Information Technology & Decision Making, Vol. 14, No. 03, 2015, pp. 565-596.
5. Irina Khutsishvili, Gia Sirbiladze and Gvantsa Tsulaia, Hesitant Fuzzy MADM Approach in Optimal Selection of Investment Projects, EPiC Series in Computer Science Volume 36 - Proceedings of the first Global Conference on Artificial Intelligence (GCAI 2015), Tbilisi, Georgia, October 16-19, 2015, 151-162.
6. Gia Sirbiladze, Irina Khutsishvili, Bezhan Ghvaberidze, Multistage Decision-Making Fuzzy Methodology for Optimal Investments Based on Experts' Evaluations, European Journal of Operational Research, Volume 232, Issue 1, 2014, pp. 169–177.
7. I. Khutsishvili, G. Sirbiladze, B. Ghvaberidze, Possibilistic Aggregations in the Investment Decision Making, World Academy of Science, Engineering and Technology International Journal of Mathematical, Computational, Physical and Quantum Engineering, Vol.8, No.10, 2014, 1326 – 1330.
8. K. Gelashvili, L. Alkhazishvili, I. Khutsishvili, N. Ananiaishvili, On the modification of heavy ball method, Proceedings of A. Razmadze Mathematical Institute, 161 (2013), 83-95.
9. G. Sirbiladze, I. Khutsishvili, A. Sikharulidze, B. Ghvaberidze, Possibilistic Technology for Evaluation of Credit Risks of Investment Projects, Proceedings of the 1st WSEAS International Conference on Information Technology and Computer Networks (ITCN '12), Vienna, Austria, 2012, 61–66.
10. G.Sirbiladze, I.Khutsishvili, B.Ghvaberidze, Fuzzy Modeling of Minimal Crediting Risks in Investment Decisions, Proceedings of the 14th WSEAS International Conference on AUTOMATIC CONTROL, MODELLING and SIMULATION (ACMOS '12), Recent Researches in Automatic Control and Electronics, Saint Malo & Mont Saint Michel, France, 2012, pp. 29-36.
11. Gia Sirbiladze, Irina Khutsishvili and Pridon Dvalishvili, Decision Precising Fuzzy Technology to Evaluate the Credit Risks of Investment Projects, Proceedings of the IEEE 10th International Conference on Intelligent Systems Design and Applications (ISDA'10), Session – Fuzzy Logic Based Applications, Cairo, Egypt, 2010, pp. 103-108.
12. I. Khutsishvili, The Combined Decision Making Technology based on the Statistical and Fuzzy Analysis and its Application in Forecast's Modeling, WSEAS TRANSACTIONS on SYSTEMS, Issue 7, Volume 8, July 2009, pp. 891-901.
13. I. Khutsishvili, G. Sirbiladze, Decision Support's Precising Technology in the Investment Project Risk Management, Proceedings of the 11th WSEAS International Conference on AUTOMATIC, CONTROL, MODELLING and SIMULATION (ACMOS '09), Istanbul, Turkey, 2009, 303-311.
14. I. Khutsishvili, Statistical Method of Fuzzy Grades' Analysis with the great Number of Activities, Georgian Electronic Scientific Journal: Computer Science and Telecommunications, 2(16), 2008, 32-39, (In Russian).
15. I. Khutsishvili, Statistical Method of Fuzzy Grades' Analysis for Forecast Modeling, Applied Mathematics, Informatics and Mechanics, Vol.11, # 1, 2006, pp.12-20.

16. I. Khutsishvili, An application of the statistical method of fuzzy grades' analysis, Bulletin of the Georgian Academy of Sciences, Vol.173, # 2, 2006, pp. 266-268.

Presentations at Scientific Conferences (over the last 5 years):

1. 2017, May 14-15, Amsterdam, The Netherlands, World Academy of Science, Engineering and Technology (WASET), 19th International Conference on Operations Research and Fuzziology – ICORF 2017, „Triangular Hesitant Fuzzy TOPSIS Approach in Investment Projects Management“, Irina Khutsishvili, <http://waset.org/conference/2017/05/amsterdam/ICORF>.
2. 2016, September 5–9, Batumi, Georgia, VII International Joint Conference of Georgian Mathematical Union & Georgian Mechanical Union dedicated to 125-th birthday anniversary of academician N. Muskhelishvili, „On the MADM Problem Based on TOPSIS with Triangular Hesitant Information“, Irina Khutsishvili, http://www.gmu.ge/Batumi2016/index_Geo.html.
3. 2015, July 16-20, Zakynthos Island, Greece, World Scientific and Engineering Academy and Society (WSEAS), The 19th International Conference on Circuits, Systems, Communications and Computers (CSCC 2015), „TOPSIS Based Hesitant Fuzzy MADM for Optimal Investment Decisions“, Irina Khutsishvili, Gia Sirbiladze and Bezhan Ghvaberidze, <http://www.inase.org/library/2015/zakynthos/SYSTEMS.pdf>.
4. 2014, October 27-28, Barcelona, Spain, World Academy of Science, Engineering and Technology, 16th WASET International Conference on Fuzzy Systems and Neural Computing - ICFSNC 2014, „Possibilistic Aggregations in the Investment Decision Making“, I. Khutsishvili, G. Sirbiladze and B. Ghvaberidze, <http://waset.org/conference/2014/10/barcelona/ICFSNC>.
5. 2013, July 1-4, Rome, Italy, Association of European Operational Research Societies, 26th European Conference on Operational Research (EURO-INFORMS 2013), „New Possibilistic Aggregations for Optimal Valuation of Credit Risks of Investment Projects“, Irina Khutsishvili and Gia Sirbiladze, <http://en.uniroma1.it/notizie/euro-informs-2013-joint-international-meeting> (page 271).

Other activities:

- Georgian International Journal of Science and Technology – Editor of Subsection “Intelligent systems and computational intelligence, systems and technologies of information security”.
- European Journal of Operational Research (Elsevier), Transactions of A. Razmadze Mathematical Institute (Elsevier) – reviewer.
- WSEAS International Conference on COMPUTING and COMPUTATIONAL INTELLIGENCE (CI '09) and WSEAS European Computing Conference (ECC'09) – Organising Committee Member, Editor of Conference Proceedings.
- Scientific Conference “Computing 2008” dedicated to the 90th anniversary of Ivane Javakhishvili Tbilisi State University - Organising Committee Member.