

ANGELIKA LESKOVSKAYA

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Research experience in operations research using AIMMS, AMPL, CPLEX, C/C++, FORTRAN, GAMS, Mathematica, MATLAB, PROMODEL, Python, SPSS/JMP/SAS optimization modeling tools. Teaching experience in mathematics, statistics, IT/CS, and operations management. Professional experience in banking, financial, manufacturing, and project management. Fluent in English and Russian.

EXPERIENCE

08/18–Present Southern Methodist University, Cox School of Business Dallas, TX
Visiting Professor of Practice, Information Technology and Operations Management
Teaching ITOM 3306 Operations Management class.

08/05–05/07, 08/10–Present Southern Methodist University Dallas, TX
Ph.D. Candidate in Operations Research EMIS dept

RESEARCH: Design and implementation of exact and heuristic algorithms for generalized interval-flow networks with fixed charges, meta-heuristics, linear/non-linear programming and model development, mixed-integer network algorithms and methodologies, wireless sensor networks, supply chain activity indices and microeconomic indicators, impact networks and infrastructure interdependencies. Use optimization, forecasting, decision analysis, data mining, simulation, stochastic modeling tools and statistical data analysis software (AIMMS, AMPL, C, CPLEX, FORTRAN, Frontline Solvers, GAMS, MATLAB, MS Excel/Access, PROMODEL, JMP/SAS, Python, SPSS).

TEACHING: Lectures - Operations Management (ITOM 3306, Analytic Solver, Fall 2017, Spring 2018), Introduction to Statistical Methods (STAT 2331, Spring 2017, Fall 2017), Statistical Methods for Engineers and Applied Scientists (STAT/CSE 4340, May 2017, January 2017, August 2014), Queueing Theory (EMIS 8372, Mathematica, Fall 2013), Computing Technology (EMIS 1305, ME 1305, 2009-2016). Graded graduate courses (Integer and Linear Programming, Mathematics for Optimization, Network Flows, Production System Engineering), and assisted Management Decision Analysis class (MBA, Excel, Crystal Ball).

05/13–08/13 Sabre Airline Solutions Southlake, TX
Internship, Operations Research Analyst-Contributor

Modeled stochastic demand of booking control strategy for airline network revenue management problem using sub-gradient optimization via Lagrangian relaxation. Contributed to implementation (C++, CPLEX) of expected revenue for the Airline Planning and Operations Simulator tool at AirVision department.

06/11–06/13 Elite Research, LLC Dallas, TX
Research Analyst

Conducted statistical analysis and modeling (SPSS, SAS) to support corporate, nonprofit, academic (behavioral/social sciences), and medical researchers in project design, data analysis, and reporting of efficient models and accurate results. Led the project analyzing data for fisheries with zero-inflated models (SAS).

08/02–12/08 Brookhaven College Dallas, TX
Adjunct Faculty: Mathematics, Computer Information Technology

Developed and taught courses in developmental math, college algebra, plane trigonometry, business and economics math, precalculus, business calculus and applications, programming logic and design (MS Excel/Access, SQL, VB.net, Visio)

03/97–07/01 Belarusian/American Joint Venture U & A Company Minsk, Belarus
Project Manager, Senior Analyst

Led and managed business projects (veterinary products, natural gas and oil). Designed and developed decision support tools (MS Access/Excel/VBA) to analyze and forecast daily/weekly operations to solve business problems (OM, RM, pricing, inventory, customs regulations and customer satisfaction). Conducted quantitative analysis and presented recommendations to executive management.

08/94–03/97 Bank of Reconversion & Development Minsk, Belarus
Principal Analyst, Programmer & Database Administrator

Researched and developed economic models supporting bank information system. Communicating status

and findings to senior management and key stakeholders. Installed and adapted a programming package to replace dept manual operations, coordinated transition to new MIS.

11/91–06/93

MicroComp Scientific and Manufacturing Firm

Minsk, Belarus

Programmer & Software Developer

Designed, developed, implemented, and supported information system (FoxPro) for the chemical plant. Conducted unit and system acceptance tests. Developed and established a schedule for ordering raw materials and equipment production for the chemical industry. Reorganized departments output and standardized reports for plant executive management.

EDUCATION

Ph.D. Operations Research · SOUTHERN METHODIST UNIVERSITY · GPA 3.96 *Expected: May, 2019*
Title: Extreme-point Search Heuristics for Generalized Interval-Flow Network Problems with Fixed Charges

Associate, Applied Science, Software Programmer-Developer · BROOKHAVEN COLLEGE, 2003 · GPA 4.0

M.A., Applied Mathematics AND **M.A., Economics** · BELARUSIAN STATE UNIVERSITY, FACULTY OF APPLIED MATHEMATICS AND INFORMATION TECHNOLOGY, MIS DEPARTMENT, 1993 · GPA 3.5

PROFESSIONAL DEVELOPMENT

Post-Graduate Pedagogical Training, 1998 (Minsk Academy of Education)

Course Certificate – The Effective Manager, 1999 (British Open University)

Java Course Certificate with Honor, 2001 (Dallas Java User’s Group)

Six Sigma Green Belt, 2012

Los Alamos National Laboratory, Science of Signatures Advanced Studies Institute, April 17-May 5, 2017

Teaching Effectiveness Symposium at SMU, August 2018

AWARDS & NOMINATIONS

Thomas J. Hoyt Memorial Scholarship, Deans Honor Roll (2002 Brookhaven College)

EMIS Frederick E. Terman Award (2007, 2013 SMU)

EMIS Outstanding Graduate Student (2011 SMU)

Finalist in the AIMMS-CPLEX/MOFTA 2009 Optimization Modeling Competition (Team SMU).

Omega Rho International Honor Society

Attending 2014 INFORMS Doctoral Student Colloquium in San Francisco, CA

Attending 2018 POMS Doctoral Consortium in Houston, TX

PUBLICATIONS & PRESENTATIONS

- [1] DEARING, R. D., LESKOVSKAYA, A., AND KRATZ, T. J. Maintenance Scheduling Project Report. Department of Industrial & Systems Engineering, Lehigh University. Finalist in the AIMMS-CPLEX/MOFTA 2009 Optimization Modeling Competition.
- [2] LESKOVSKAYA, A., AND BARR, S. R. Generalized Interval-flow Networks: Models, Applications, and Solution Methods. INFORMS 2014 Annual Meeting, November 9-12, San Francisco, CA.
- [3] LESKOVSKAYA, A., AND BARR, S. R. Extreme-Point Search Heuristics for Generalized Interval-Flow Network Problems. INFORMS 2015 Annual Meeting, October 31 - November 4, Philadelphia, PA.

- [4] LESKOVSKAYA, A., AND BARR, S. R. Extreme-Point Search Methods for Solving Fixed-Charge Generalized Networks. INFORMS 2017 Annual Meeting, October 22 - 25, Houston, TX.
- [5] LESKOVSKAYA, A., AND BARR, S. R. Extreme-Point Search Heuristics for Solving Fixed-Charge Generalized Network Problems Using Parametric Ghost Image Process Approach. INFORMS 2018 Annual Meeting, November 4 - 7, Phoenix, AZ.
- [6] LESKOVSKAYA, A., AND BARR, S. R. Search Heuristics for Solving Fixed-Charge Generalized Networks. 2019 INFORMS Computing Society Conference, January 6 - 8, 2019, Knoxville, TN.
- [7] MAHJOUR, D., LESKOVSKAYA, A., AND MATULA, D. Approximating the independent domatic partition problem in random geometric graphs – an experimental study. In *Proceedings of the 22nd Canadian Conference on Computational Geometry (CCCG2010)* (2010), pp. 195–198.