

*Curriculum Vitae*

**Dr. Vladimir L. Boginski**

Associate Professor

University of Central Florida

Department of Industrial Engineering and Management Systems

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**Professional Preparation**

- ◇ **Ph.D. in Industrial and Systems Engineering**, August 2005 (GPA 4.0/4.0)  
Department of Industrial and Systems Engineering, University of Florida, Gainesville, FL
- ◇ **M.S. in Industrial and Systems Engineering**, May 2003 (GPA 4.0/4.0)  
Department of Industrial and Systems Engineering, University of Florida, Gainesville, FL
- ◇ **B.S. in Applied Mathematics and Physics**, June 2000, *Honor of Excellence Diploma*  
Moscow Institute of Physics and Technology, Moscow, Russia

**Citizenship**

U.S. citizen

**Appointments**

- ◇ Associate Professor (with tenure), Department of Industrial Engineering and Management Systems, University of Central Florida, Orlando, FL, August 2015 - present
- ◇ Courtesy Associate Professor, Department of Industrial and Systems Engineering, University of Florida, Gainesville, FL, August 2015 - present
- ◇ Assistant Professor/Graduate Faculty/Systems Engineering Program Advisor, Research and Engineering Education Facility (UF-REEF) & Department of Industrial and Systems Engineering, University of Florida, Gainesville, FL/Shalimar, FL, 2010 – 2015
- ◇ Visiting Assistant Professor/Graduate Faculty/Systems Engineering Program Advisor, Research and Engineering Education Facility (UF-REEF) & Department of Industrial and Systems Engineering, University of Florida, Shalimar, FL, 2007 – 2010
- ◇ Assistant Professor, Department of Industrial Engineering, FAMU-FSU College of Engineering, Tallahassee, FL, 2005 – 2007
- ◇ Research/Teaching Assistant, Department of Industrial and Systems Engineering, University of Florida, Gainesville, FL, 2001 – 2005

**Publications<sup>1</sup>**

• **Refereed Journal Articles**

1. V. Stozhkov, G. Pastukhov, V. Boginski, and E.L. Pasiliao. New analytical lower bounds on the clique number of a graph. *Optimization Methods and Software*, 2016 (accepted). DOI: 10.1080/10556788.2016.1172578.
2. O. Yezerska, S. Butenko, and V. Boginski. Detecting robust cliques in graphs subject to uncertain edge failures. *Annals of Operations Research*, 2016 (accepted). DOI: 10.1007/s10479-016-2161-0.

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<sup>1</sup>The names of graduate students and postdoctoral researchers advised/co-advised by Boginski (at the time of paper preparation) are underlined. The names of graduate students advised/co-advised by faculty co-authors (at the time of paper preparation) are dash-underlined.

3. V. Stozhkov, V. Boginski, O.A. Prokopyev, and E.L. Pasiliao. A simple greedy heuristic for linear assignment interdiction. *Annals of Operations Research*, 2016 (accepted). DOI: 10.1007/s10479-016-2118-3.
4. J. Ma, F. Mahdavi Pajouh, B. Balasundaram, and V. Boginski. The minimum spanning  $k$ -core problem with bounded CVaR under probabilistic edge failures. *INFORMS Journal on Computing*, 28(2): 295–307, 2016.
5. A. Veremyev, V. Boginski, and E.L. Pasiliao. Potential energy principles in networked systems and their connections to optimization problems on graphs. *Optimization Letters*, 9: 585–600, 2015.
6. A. Veremyev, V. Boginski, and E.L. Pasiliao. Analytical characterizations of some classes of optimal strongly attack-tolerant networks and their Laplacian spectra. *Journal of Global Optimization*, 61: 109–138, 2015.
7. F. Mahdavi Pajouh, J. Walteros, V. Boginski, and E.L. Pasiliao. Minimum edge blocker dominating set problem. *European Journal of Operational Research*, 247: 16–26, 2015.
8. A. Veremyev, O.A. Prokopyev, V. Boginski, and E.L. Pasiliao. Finding maximum subgraphs with relatively large vertex connectivity. *European Journal of Operational Research*, 239: 349–362, 2014.
9. F. Mahdavi Pajouh, V. Boginski, and E.L. Pasiliao. Minimum vertex blocker clique problem. *Networks*, 64: 48–64, 2014.
10. A. Veremyev, A. Sorokin, V. Boginski, and E.L. Pasiliao. Minimum vertex cover problem for coupled interdependent networks with cascading failures. *European Journal of Operational Research*, 232: 499–511, 2014.
11. A. Buchanan, J.S. Sung, V. Boginski, and S. Butenko. On connected dominating sets of restricted diameter. *European Journal of Operational Research*, 236: 410–418, 2014.
12. A. Veremyev, V. Boginski, and E.L. Pasiliao. Exact identification of critical nodes in sparse networks via new compact formulations. *Optimization Letters*, 8: 1245–1259, 2014.
13. V. Boginski, S. Butenko, O. Shirokikh, S. Trukhanov, and J. Gil-Lafuente. A network-based data mining approach to portfolio selection via weighted clique relaxations. *Annals of Operations Research*, 216: 23–34, 2014.
14. G. Pastukhov, A. Veremyev, V. Boginski, and E.L. Pasiliao. Optimal design and augmentation of strongly attack-tolerant two-hop clusters in directed networks. *Journal of Combinatorial Optimization*, 27: 462–486, 2014.
15. A. Kammerdiner, A. Sprintson, E.L. Pasiliao, and V. Boginski. Optimization of discrete broadcast under uncertainty using conditional value-at-risk. *Optimization Letters*, 8: 45–59, 2014.
16. O. Shirokikh, A. Sorokin, and V. Boginski. A note on transmission switching in electric grids with uncertain line failures. *Energy Systems*, 4: 419–430, 2013.
17. J. Pattillo, A. Veremyev, S. Butenko, and V. Boginski. On the maximum quasi-clique problem. *Discrete Applied Mathematics*, 161: 244–257, 2013.
18. O. Shirokikh, G. Pastukhov, V. Boginski, and S. Butenko. Computational study of the U.S. stock market evolution: A rank correlation-based network model. *Computational Management Science*, 10: 81–103, 2013.
19. M. Carvalho, A. Sorokin, V. Boginski, and B. Balasundaram. Topology design for on-demand dual-path routing in wireless networks. *Optimization Letters*, 7: 695–707, 2013.
20. A. Sorokin, V. Boginski, A. Nahapetyan, and P.M. Pardalos. Computational risk management techniques for fixed charge network flow problems with uncertain arc failures. *Journal of Combinatorial Optimization*, 25: 99–122, 2013.
21. A. Veremyev, V. Boginski, P.A. Krokhamal, and D.E. Jeffcoat. Dense percolation in large-scale mean-field random networks is provably “explosive”. *PLOS ONE* 7(12): e51883, 2012. DOI: 10.1371/journal.pone.0051883.

22. A. Veremyev and V. Boginski. Identifying large robust network clusters via new compact formulations of maximum  $k$ -club problems. *European Journal of Operational Research*, 218: 316–326, 2012.
  23. S. Stefan, M. Ehsan, W. Pearson, A. Aksenov, V. Boginski, B. Bendiak, and J. Eyler. Differentiation of closely related isomers: Application of data mining techniques in conjunction with variable wavelength infrared multiple photon dissociation mass spectrometry for identification of glucose-containing disaccharide ions. *Analytical Chemistry*, 83(22): 8468–8476, 2011.
  24. K. Kalinchenko, A. Veremyev, V. Boginski, D.E. Jeffcoat, and S. Uryasev. Robust connectivity issues in dynamic sensor networks for area surveillance under uncertainty. *Pacific Journal of Optimization*, 7(2): 235–248, 2011.
  25. N. Boyko, T. Turko, V. Boginski, D.E. Jeffcoat, S. Uryasev, G. Zrazhevsky, and P.M. Pardalos. Robust multi-sensor scheduling for multi-site surveillance. *Journal of Combinatorial Optimization*, 22(1): 35–51, 2011.
  26. V. Boginski, C.W. Commander, and T. Turko. Polynomial-time identification of robust network flows under uncertain arc failures. *Optimization Letters*, 3(3):461–473, 2009.
  27. A. Sorokin, N. Boyko, V. Boginski, S. Uryasev, and P.M. Pardalos. Mathematical programming techniques for sensor networks, *Algorithms*, 2: 565–581, 2009.
  28. A. Arulselvan, G. Baourakis, V. Boginski, E. Korchina, and P.M. Pardalos. Analysis of food industry market using network approaches. *British Food Journal*, 110(9): 916–928, 2008.
  29. V. Boginski, S. Butenko, and P.M. Pardalos. Mining market data: A network approach. *Computers and Operations Research*, 33: 3171–3184, 2006 (**Ranked in Top 25 hottest articles in Computers and Operations Research by ScienceDirect during 01-09/06**).
  30. A. Arulselvan, V. Boginski, A. Kammerdiner, and P.M. Pardalos. Analysis of stock market structure by identifying connected components in the market graph. *Journal of Financial Decision Making*, 1(1): 27–37, 2005.
  31. V. Boginski, S. Butenko, and P.M. Pardalos. Statistical analysis of financial networks. *Computational Statistics and Data Analysis*, 48(2): 431–443, 2005 (**Ranked in Top 25 hottest articles in Computational Statistics and Data Analysis by ScienceDirect during 10/04-03/05**).
  32. V. Boginski, S. Butenko, and P.M. Pardalos. Network models of massive datasets. *Computer Science and Information Systems*, 1: 75–89, 2004.
- **Refereed Book Chapters**
    33. F. Mahdavi Pajouh, A. Veremyev, and V. Boginski. Analysis and design of robust network clusters with bounded diameter. In *Examining Robustness and Vulnerability of Critical Infrastructure Networks*, S. Butenko et al. (eds.), pp. 141–160, IOS Press, 2014.
    34. O. Shirokikh, V. Stozhkov, and V. Boginski. Combinatorial optimization techniques for network-based data mining. In *Handbook of Combinatorial Optimization, 2nd edition*, P.M. Pardalos et al. (eds.), pp. 631–672, Springer, 2013.
    35. D. Jallo, D. Budai, V. Boginski, B. Goldengorin, and P.M. Pardalos. Network-based representation of stock market dynamics: An application to American and Swedish stock markets. In *Models, Algorithms, and Technologies for Network Analysis*, B. Goldengorin et al. (eds.), pp. 93–106, Springer, 2013.
    36. A. Veremyev and V. Boginski. Robustness and strong attack tolerance of low-diameter networks. In *Dynamics of Information Systems: Mathematical Foundations*, A. Sorokin et al. (eds.), pp. 137–156, Springer, 2012.
    37. V. Boginski. Network-based data mining: operations research techniques and applications. In *Wiley Encyclopedia of Operations Research and Management Science*, J. Cochran et al. (eds.), pp. 3498–3508, John Wiley and Sons, 2011.

38. V. Boginski and C.W. Commander. Identifying critical nodes in protein-protein interaction networks. In *Clustering Challenges in Biological Networks*, S. Butenko et al. (eds.), pp. 153–167, World Scientific, 2009.
39. O. A. Prokopyev, V. Boginski, W. Chaovalitwongse, P.M. Pardalos, J.C. Sackellares, and P.R. Carney. Network-based techniques in EEG data analysis and epileptic brain modeling, In *Data Mining in Biomedicine*, P.M. Pardalos et al. (eds.), pp. 559–573, Springer, 2007.
40. W. Chaovalitwongse, L.D. Iasemidis, P.R. Carney, J.C. Sackellares, D.-S. Shiau, L.K. Dance, O. A. Prokopyev, V. Boginski, and P.M. Pardalos. Data mining in EEG: Application to epileptic brain disorders. In *Data Mining in Biomedicine*, P.M. Pardalos, et al. (eds.), pp. 459–481, Springer, 2007.
41. V. Boginski, P.M. Pardalos, and A. Vazacopoulos. Network-based models and algorithms in data mining and knowledge discovery, In *Handbook of Combinatorial Optimization*, D.-Z. Du and P.M. Pardalos (eds.), Supplementary Volume B, pp. 217–258, 2005.
42. P.M. Pardalos, V. Boginski, O. Prokopyev, W. Suharitdamrong, P.R. Carney, W. Chaowalitwongse, and A. Vazacopoulos. Optimization in medicine. In *Essays and Surveys on Global Optimization*, C. Audet and P. Hansen (eds.), pp. 211–232, 2005.
43. V. Boginski, S. Butenko, and P.M. Pardalos. Network-based techniques in the analysis of the stock market. In *Supply Chain and Finance*, P. M. Pardalos, et al. (eds.), World Scientific, pp. 1–14, 2004.
44. V. Boginski, S. Butenko, and P. M. Pardalos. Matrix-based methods for college football rankings. In *Economics, Management and Optimization in Sports*, S. Butenko et al. (eds.), Springer, pp. 1-14, 2004.
45. V. Boginski, S. Butenko, P. M. Pardalos, and O. Prokopyev. Collaboration networks in sports. In *Economics, Management and Optimization in Sports*, S. Butenko et al. (eds.), Springer, pp. 265-277, 2004.
46. V. Boginski, S. Butenko, and P. M. Pardalos. On structural properties of the market graph. In *Innovations in Financial and Economic Networks*, A. Nagurney (ed.), Edward Elgar Publishers, pp. 28-45, 2003.
47. V. Boginski, S. Butenko, and P. M. Pardalos. Modeling and optimization in massive graphs. In *Novel Approaches to Hard Discrete Optimization*, P.M. Pardalos and H. Wolkowitz (eds.), AMS, pp. 17-39, 2003.

• **Conference Proceedings and Abstracts**

48. A. Semenov, A. Nikolaev, A. Veremyev, V. Boginski, and E.L. Pasiliao. Analysis of viral advertisement re-posting activity in social media. To appear in *Proceedings of the 5th International Conference on Computational Social Networks*, Ho Chi Minh City, Vietnam, August 2016.
49. L.V. Kulemina, G. Pastukhov, A. Veremyev, and V. Boginski. Using clique relaxations to identify highly connected clusters in molecular networks in cancer. *Proceedings of the 2013 AACR-NCI-EORTC International Conference on Molecular Targets and Cancer Therapeutics*, 2013 Nov 12-16; Boston AACR; *Molecular Cancer Therapeutics*, 10(13 Suppl), 2013.
50. A. Arulselvan, P. Mendoza, V. Boginski, and P.M. Pardalos. Predicting the nexus between post-secondary education affordability and student success: An application of network-based approaches. *Proceedings of International Conference on Advances in Social Network Analysis and Mining, IEEE Computer Society*, pp. 149-154, July 2009.
51. P. Xanthopoulos, A. Arulselvan, V. Boginski, and P.M. Pardalos. A retrospective review of social networks. *Proceedings of International Conference on Advances in Social Network Analysis and Mining, IEEE Computer Society*, pp. 300-305, July 2009.

52. V. Boginski, I. Mun, Y. Wu, K. Mason, and C. Zhang. Simulation and analysis of hospital operations and resource utilization using RFID data. *Proceedings of IEEE International Conference on RFID*, pp. 199-204, Grapevine, TX, March 2007.
53. S. Butenko, P. Pardalos, and V. Boginski. Analytic approaches to college football rankings. *Research Quarterly for Exercise and Sport*, Supplement: Suppl. S, Volume: 76, Issue: 1, pp. A13-A13, 2005.

• **Edited Books**

1. *Sensors: Theory, Algorithms, and Applications*, V. Boginski, C.W. Commander, P.M. Pardalos, and Y. Ye (eds.) Springer, ISBN: 0-387-88618-4, November 2011.
2. *Data Mining in Biomedicine*, P.M. Pardalos, V. Boginski and A. Vazacopoulos (eds.) Springer, ISBN-10: 0-387-69318-1, February 2007 (also published in paperback in 2010).

**Funded Projects**

1. **V. Boginski** (PI), J. Shea (co-PI), T. Wong (co-PI), P. Kumar (co-PI). *Assured Communications for Cooperative Engagement*, \$2,020,297 (\$900,000 awarded to date), Air Force Research Laboratory/Eglin AFB, 05/2015 - 11/2017.
2. M.T. Thai (PI), **V. Boginski** (co-PI), C. McCarty (co-PI), Y. Yin (co-PI), A. Sarwat (co-PI). *Collaborative Research: RIPS Type 2: Vulnerability Assessment and Resilient Design of Interdependent Infrastructures*, \$1,336,682, National Science Foundation, 12/2014 - 12/2017.
3. *AFRL Mathematical Modeling and Optimization Institute* (multiple projects, with J. Geunes, D. Hahn, W. Dixon, J. Shea, \$4,613,746 awarded to date), Air Force Research Laboratory/Eglin AFB, 05/2013-12/2016.
4. **V. Boginski** (PI). *AFRL/RW and UF-DOOR Partnership in Network Science*, \$234,497, Air Force Research Laboratory/Eglin AFB, 08/2012 - 12/2015.
5. S. Butenko (PI), B. Balasundaram (co-PI), and **V. Boginski** (co-PI). *Clique Relaxations in Biological and Social Network Analysis: Foundations and Algorithms*, \$452,942, Air Force Office of Scientific Research, 07/2012 - 06/2015.
6. **V. Boginski** (PI). *New Robustness Characteristics and Phase Transition Problems for Complex Networks in Dynamic and Uncertain Environments*, **Young Investigator Award**, \$399,881, U.S. Department of Defense/DTRA, 07/2009 - 12/2013.
7. B. Balasundaram (PI), **V. Boginski** (co-PI), S. Butenko (co-PI), and S. Uryasev (co-PI). *Robust Optimization for Connectivity and Flow Patterns in Dynamic Networks*, \$589,092, U.S. Department of Energy, 09/2009-09/2013.
8. **V. Boginski** (PI). *Reliability of Complex Networks under Uncertainty*, \$161,489 (total for three one-year tasks), Air Force Research Laboratory/Eglin AFB, 01/2009 - 09/2012.
9. DURIP: *Equipment for DoD-funded Large-scale Data Analysis and Network Optimization Projects at the University of Florida*, \$215,937 (with P.M. Pardalos and S. Uryasev), U.S. Department of Defense/AFOSR, 06/2010 - 06/2012.
10. J.R. Eyler (PI), B. Bendiak (co-PI), and **V. Boginski** (co-PI). *Differentiating Oligosaccharide Isomers via Infrared Spectra of Gaseous Ions*, \$440,000, National Science Foundation, 09/2007 - 08/2011.
11. S. Butenko (PI), **V. Boginski** (co-PI/ UF PI), and O. Prokopyev (co-PI/ UPitt PI). *Optimization Techniques for Clustering, Connectivity, and Flow Problems in Complex Networks*, \$349,952, Air Force Office of Scientific Research, 08/2008 - 08/2011.
12. **V. Boginski** (PI) and S. Uryasev (co-PI). *Dynamic Sensor Networks under Risk and Robustness Considerations*, \$65,743, Air Force Research Laboratory/Eglin AFB, 05/2009 - 05/2010.

13. P.M. Pardalos (PI), **V. Boginski** (co-PI), and S. Uryasev (co-PI). *Modeling and Optimization of Network Response to WMD Attacks Under Uncertainty*, \$219,016, U.S. Department of Defense/DTRA, 01/2009-05/2010.
14. **V. Boginski** (PI). *Asymptotic Behavior of Random Graph Models*, \$15,975, Air Force Research Laboratory/Eglin AFB, 04/2009 - 01/2010.
15. J.R. Rogacki (PI), **V. Boginski** (co-PI), and S.A. Heise (co-PI). *Development of New Capabilities in Training Skilled Workforce in the Area of Systems Engineering in Northwest Florida*, \$75,532, Florida's Great Northwest (federally funded by U.S. Department of Labor), 02/2009-12/2009.
16. **V. Boginski** (PI), J.R. Rogacki (co-PI), and S. Uryasev (co-PI). *Design of Sensor Networks*, \$51,317, Air Force Research Laboratory/Eglin AFB, 05/2008 - 07/2009.
17. **V. Boginski** (PI). *Studying the Impact of Social Factors on Stock Market Behavior Using Data Mining Techniques*, \$15,000, FSU Council on Research and Creativity, 05/2006-08/2006.

#### Externally Funded Conferences and Workshops Co-Organized

1. *NATO Advanced Research Workshop on Examining Robustness and Vulnerability of Critical Infrastructure Networks*, funded by NATO, 06/03/2013-06/05/2013, Kyiv, Ukraine.
2. *2nd International Conference on the Dynamics of Information Systems*, funded by AFRL/AFOSR, 02/03/2010-02/05/2010, Destin, FL.
3. *Conference on Engineering Risk Control and Optimization*, funded by AFRL/AFOSR, 02/22/2009-02/23/2009, Gainesville, FL.
4. *Conference "Sensors 2008: Theory, Algorithms and Applications"*, funded by AFRL/AFOSR, 04/24/2008-04/26/2008, Shalimar, FL.

#### Invited Presentations

1. *Analyzing Cohesive Clusters in Complex Networks*, Plenary presentation at the 4th International Conference on Network Analysis, May 2014, Nizhny Novgorod, Russia.
2. *Modeling and Optimization Techniques for Ensuring Robustness in Complex Networked Systems*, Distinguished Seminar Series, Department of Industrial Engineering and Management Systems, University of Central Florida, January 2014, Orlando, FL.
3. *Diameter-based Robust Clusters in Networks*, NATO Advanced Research Workshop on Examining Robustness and Vulnerability of Critical Infrastructure Networks, June 2013, Kyiv, Ukraine.
4. *The Maximum Quasi-clique Problem*, 4th International Conference on the Dynamics of Information Systems, February 2012, Gainesville, FL.
5. *Network Models for Clustering and Portfolio Selection in Financial Markets*, 61st Annual IIE Conference and Expo, May 2011, Reno, NV.
6. *Robustness and Vulnerability of Connected Clusters in Complex Networks*, INFORMS Northeast Regional Conference, May 2011, Amherst, MA.
7. *Finding Quasi-Cliques in Networks*, INFORMS Northeast Regional Conference, May 2011, Amherst, MA.
8. *Analysis and Design of Low-Diameter Attack-Tolerant Clusters in Complex Networks*, 3rd International Conference on the Dynamics of Information Systems, February 2011, Gainesville, FL.
9. *Computational Risk Management Techniques for Fixed Charge Network Flow Problems with Uncertain Arc Disruptions*, INFORMS Annual Meeting, November 2010, Austin, TX.

10. *Robust Performance of Networked Systems in Adverse and Uncertain Environments*, Invited speaker for the research seminar at School of Computing, Informatics, and Decision Systems Engineering, Arizona State University, March 2010, Tempe, AZ.
11. *Asymptotic Behavior and Phase Transitions for Clique Relaxations in Random Graphs*, 2nd International Conference on the Dynamics of Information Systems, February 2010, Destin, FL.
12. *Diagnosis of Wegener's Granulomatosis Using Predictive Modeling Techniques*, INFORMS Annual Meeting, October 2009, San Diego, CA.
13. *Connectivity and Flow Problems on Networks under Uncertainty and Robustness Considerations*, 20th International Symposium on Mathematical Programming, August 2009, Chicago, IL.
14. *Identifying Critical Nodes in Protein-Protein Interaction Networks*, INFORMS Annual Meeting, October 2008, Washington, DC.
15. *Optimization and Data Mining Issues in Robust Performance of Networked Systems in Uncertain Environments*, Invited speaker for the lecture series at Florida Institute for Human and Machine Cognition (IHMC), October 2008, Pensacola, FL.
16. *Solving Network Flow Problems Under Uncertainty*, Conference "Sensors 2008: Theory, Algorithms and Applications", April 2008, Shalimar, FL.
17. *Distinguishing Disaccharides Using Dissociation Spectra via Predictive Modeling Techniques*, Conference on Data Mining, Systems Analysis, and Optimization in Biomedicine, March 2007, Gainesville, FL.
18. *Simulation and Analysis of Hospital Operations and Resource Utilization Using RFID Data*, IEEE International Conference on RFID, March 2007, Grapevine, TX.
19. *Network-Based Approaches for Mining Financial Data*, International Conference on Financial Engineering, March 2006, Gainesville, FL.
20. *Clustering Stocks Using Network Models*, INFORMS Annual Meeting, November 2005, San Francisco, CA.
21. *Analysis of Stock Market Data Using Network-Based Approaches*, INFORMS Annual Meeting, October 2004, Denver, CO.
22. *Network-based Techniques in EEG Data Analysis and Epileptic Brain Modeling*, INFORMS Annual Meeting, October 2004, Denver, CO.
23. *Network-based Approaches to the Analysis of Financial Data*, SIAM Student Workshop (sponsored by NSF), March 2004, Gainesville, FL.
24. *On Structural Properties of the Market Graph*, INFORMS Annual Meeting, October 2003, Atlanta, GA.
25. *Optimization in Data Mining*, Dash Optimization, Inc. Users Meeting, October 2003, San Francisco, CA.
26. *Collaboration Networks in Sports*, Congreso Mundial de Optimizacion Social y Gestion Economica del Deporte, May 2003, Barcelona, Spain.

### Professional Service Activities

- ◇ Associate Editor, *Optimization Letters*, 2006–present.
- ◇ Vice-chair for Networks, INFORMS Optimization Society, 2013–2015.

- ◇ Reviewer for *Annals of Operations Research*, *Computational Management Science*, *Computational Optimization and Applications*, *Computers & Industrial Engineering*, *Discrete Applied Mathematics*, *Energy Systems*, *European Journal of Operational Research*, *IIE Transactions*, *INFORMS Journal on Computing*, *Journal of Combinatorial Optimization*, *Journal of Global Optimization*, *Journal of Heuristics*, *Hydrological Processes*, *Networks*, *Optimization Letters*, *Optimization Methods and Software*, *Quantitative Finance*, *Transactions on Information Technology in BioMedicine*.
- ◇ Panelist, NSF (2008, 2009, 2010, 2012, 2013), DOE (2009, 2011), ASEE (2011).
- ◇ Cluster Chair: *Optimization/Network Optimization*, INFORMS Annual Meeting, November 2015, Philadelphia, PA.
- ◇ Program Committee member, IEEE INFOCOM Workshop on Inter-Dependent Networks, April 2015, Hong Kong.
- ◇ Cluster Chair: *Optimization/Network Optimization*, INFORMS Annual Meeting, November 2014, San Francisco, CA.
- ◇ Organizer/Chair of invited session “Clique Relaxation Models in Networks”, INFORMS Annual Meeting, October 2013, Minneapolis, MN.
- ◇ Organizer/Chair of invited session “Modeling and Optimization Techniques for Network Robustness”, INFORMS Annual Meeting, October 2012, Phoenix, AZ.
- ◇ Organizer/Chair of invited session “Optimization Models for Network Robustness”, INFORMS Annual Meeting, November 2011, Charlotte, NC.
- ◇ Program Committee member, 10th International Symposium on Experimental Algorithms (SEA 2011), May 5-7, 2011, Chania, Greece.
- ◇ Program Committee member, 4th Annual International Conference on Combinatorial Optimization and Applications (COCOAA’10), December 18-20, 2010, The Big Island, Hawaii.
- ◇ International Program Committee member, 6th International Conference on Computational Management Science, May 1-3, 2009, Geneva, Switzerland.
- ◇ Session Chair, “Data Mining Applications”, INFORMS Annual Meeting, November 4–7, 2007, Seattle, WA.
- ◇ Advisory Committee member, Conference on Systems Analysis, Data Mining and Optimization in Biomedicine, March 28–30, 2007, Gainesville, FL.
- ◇ Organizing Committee member, International Conference on Applied Optimization and Metaheuristic Innovations, July 19-21, 2006, Yalta, Ukraine.
- ◇ Advisory Board member, International Conference on Computational Management Science, May 17-19, 2006, Amsterdam, the Netherlands.
- ◇ Advisory Board member, International Conference on Computational Management Science, March 31–April 3, 2005, Gainesville, FL.
- ◇ Organizing Committee member, Conference on Systems Analysis, Data Mining and Optimization in Biomedicine, February 2–4, 2005, Gainesville, FL.
- ◇ Organizer/Chair of invited session “Data Mining in Biomedicine”, INFORMS Annual Meeting, October 2004, Denver, CO.
- ◇ Organizing Committee member, Conference on Data Mining in Biomedicine, February 16–18, 2004, Gainesville, FL.



## Graduate Student Committees

### – PhD Committee Chair/Co-Chair

- ◊ Vladimir Stozhkov, PhD, ISE (Chair, graduated in 2015): currently a postdoctoral researcher at University of Florida Research and Engineering Education Facility (UF-REEF), Shalimar, FL
- ◊ Grigory Pastukhov, PhD, ISE (Chair, graduated in 2014): currently with CSX Transportation, Jacksonville, FL
- ◊ Oleg Shirokikh, PhD, ISE (Chair, graduated in 2013): currently with Frontline Systems, Inc., Reno, NV
- ◊ Alexey Sorokin, PhD, ISE (Co-Chair, graduated in 2012): currently with Optym, Inc., Gainesville, FL
- ◊ Alexander Veremyev, PhD, ISE (Co-Chair, graduated in 2011): currently a Research Assistant Scientist at University of Florida Research and Engineering Education Facility (UF-REEF), previously an NRC Research Associate at Air Force Research Laboratory, Eglin AFB, FL

### – MS Thesis Option Committee Chair

- ◊ Emmanuel Cao, MS, ISE (graduated in 2011)
- ◊ John R. Stripling, MS, ISE (graduated in 2010)

### – PhD Committee Member

- ◊ Jiaxing Pi, ISE (expected graduation 2016)
- ◊ Ximing Wang, PhD, ISE (graduated in 2015)
- ◊ Konstantin Pavlikov, PhD, ISE (graduated in 2014)
- ◊ Chrysafis Vogiatzis, PhD, ISE (graduated in 2014)
- ◊ Jose Walteros, PhD, ISE (graduated in 2014)
- ◊ Peter Tsyurmasto, PhD, ISE (graduated in 2013)
- ◊ Vijay Pappu, PhD, ISE (graduated in 2013)
- ◊ Dmytro Korenkevych, PhD, ISE (graduated in 2013)
- ◊ Hongsheng Xu, PhD, ISE (graduated in 2012)
- ◊ Konstantin Kalinchenko, PhD, ISE (graduated in 2012)
- ◊ Nikita Boyko, PhD, ISE (graduated in 2010)
- ◊ Qipeng “Phil” Zheng, PhD, ISE (graduated in 2010)
- ◊ Alla Kammerdiner, PhD, ISE (graduated in 2008)

### – PhD Committee External Member

- ◊ Bungo Shiotani, PhD, MAE (expected graduation 2016)
- ◊ Jeremy Kleiser, PhD, MAE (graduated in 2015)
- ◊ Philip Flater, PhD, MAE (graduated in 2015)
- ◊ Nitin Chandola, PhD, MAE (graduated in 2014)
- ◊ Ryan Carter, PhD, MAE (graduated in 2012)
- ◊ Bradley Martin, PhD, MAE (graduated in 2011)
- ◊ Joel Stewart, PhD, MAE (graduated in 2009)
- ◊ Michael Nixon, PhD, MAE (graduated in 2008)

### – MS Non-Thesis Option Committee Chair

- ◊ Committee chair for over 40 graduated MS students – non-thesis option (REEF/ISE)

### **Postdoctoral Researchers Supervised**

- ◇ Dr. Vladimir Stozhkov (Fall 2015 - present)
- ◇ Dr. Konstantin Pavlikov (Fall 2014 - present)
- ◇ Dr. Yuyuan “Lance” Ouyang (Fall 2013 - Summer 2015)
- ◇ Dr. Serdar Karademir (Fall 2013 - Fall 2014)
- ◇ Dr. Foad Mahdavi Pajouh (Fall 2012 - Summer 2014)
- ◇ Dr. Alexander Veremyev (Summer 2011 - Summer 2012)
- ◇ Dr. Alla Kammerdiner (Fall 2009)

### **Courses Taught**

- ◇ ESI 6247 Experimental Design (UCF, Spring 2016)
- ◇ ESI 5219 Engineering Statistics (UCF, Fall 2015)
- ◇ ESI 6314 Deterministic Methods in Operations Research (UF, Fall 2007, Fall 2008, Fall 2009, Fall 2010, Fall 2011, Fall 2012, Fall 2014)
- ◇ ESI 6553 Systems Design (UF, Spring 2008, Spring 2009, Spring 2010, Spring 2011, Spring 2012)
- ◇ ESI 6912 Data Mining for Engineers (UF, Spring 2009, Spring 2010)
- ◇ ESI 6552 Systems Architecture (UF, Summer 2008)
- ◇ ESI 4567C Matrix and Numerical Methods in Systems Engineering (UF, Summer 2004, Fall 2004, Spring 2005)
- ◇ ESI 3312 Operations Research I (FAMU/FSU, Fall 2005, Fall 2006)
- ◇ EIN 5930 Data Mining and Operations Research Techniques (FAMU/FSU, Fall 2005, Fall 2006)
- ◇ EIN 5930 Heuristic Optimization in Engineering (FAMU/FSU, Spring 2006, Spring 2007)