

Qipeng (Phil) Zheng, Ph.D.

Associate Professor
Industrial Engineering & Management Systems,
University of Central Florida
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EDUCATION

- Ph.D. Industrial & Systems Engineering, University of Florida, Gainesville, FL, USA, August 2010.
- M.S. Automation, Tsinghua University, Beijing, P.R. China, July 2005.
- B.S. Industrial Automation, North China University of Technology, Beijing, P.R. China, July 2001.

ACADEMIC APPOINTMENTS

- Associate Professor (with tenure), Aug, 2018 –
- Assistant Professor, Aug, 2013 – Aug, 2018
Industrial Engineering & Management Systems,
University of Central Florida, Orlando, FL, USA
- Assistant Professor, Aug, 2010 – Aug, 2013
Industrial & Management Systems Engineering,
West Virginia University, Morgantown, WV, USA

RESEARCH INTERESTS

Stochastic Programming, Integer Programming, Network Optimization, Global Optimization, Optimization in Energy and Environments and Sustainability, OR in Healthcare, Transportation Planning, Supply Chain Management, Logistics, Dynamic Traffic Assignment, Artificial Intelligence.

PUBLICATIONS

“★” denotes my students on dissertation/thesis works.

“*” denotes students whose dissertation committee I serve on.

Journal Articles

- Y. Zhan★ and Q. P. Zheng. A Multistage Decision-Dependent Stochastic Bi-level Programming Approach for Power Generation Investment Expansion Planning. *IIEE Transactions*, Volume 50, Issue 8, pp 729 – 734, August 2018.
- A. Golshani*, W. Sun, Q. Zhou, Q. P. Zheng, J. Wang and F. Qiu. Coordination of Wind Farm and Pumped-Storage Hydro for a Self-Healing Power Grid, *IEEE Transactions on Sustainable Energy*, in press, 2018.

[<https://doi.org/10.1109/TSTE.2018.2819133>]

- A. Golshani*, W. Sun, Q. Zhou, Q. P. Zheng and Y. Hou. Incorporating Wind Energy in Power System Restoration Planning, *IEEE Transactions on Smart Grid*, in press, 2018.
[\[doi.org/10.1109/TSG.2017.2729592\]](https://doi.org/10.1109/TSG.2017.2729592)
- A. Razmjoo*, P. Xanthopoulos and Q. P. Zheng. Feature Importance Ranking for Classification in Mixed Online Environments. *Annals of Operations Research*, in press, 2018.
[\[https://doi.org/10.1007/s10479-018-2972-2\]](https://doi.org/10.1007/s10479-018-2972-2)
- Y. Zhan*, Q. P. Zheng, C.-L. Tseng and E. L. Pasiliao. An Accelerated Extended Cutting Plane Approach with Piecewise Linear Approximations for Signomial Geometric Programming. *Journal of Global Optimization*, Volume 70, Issue 3, pp 579-599, March 2018.
- A. Golshani*, W. Sun, Q. Zhou, Q. P. Zheng and J. Tong. Two-stage Adaptive Restoration Decision Support System for a Self-healing Power Grid. *IEEE Transactions on Industrial Informatics*, Volume 13, Issue 6, pp 2802 – 2812, December 2017.
- A. Razmjoo*, P. Xanthopoulos and Q. P. Zheng. Online Feature Importance Ranking based on Sensitivity Analysis. *Expert Systems with Applications*, Volume 85, pp 397 – 406, November 2017.
- Y. Zhan*, Q. P. Zheng, J. Wang and P. Pinson. Generation Expansion Planning with Large Amounts of Wind Power via Decision-Dependent Stochastic Programming. *IEEE Transactions on Power Systems*, Volume 32, Issue 4, pp 3015 - 3026, July 2017.
- Z. Huang*, Q. P. Zheng, E. L. Pasiliao and D. Simmons. Exact algorithms on reliable routing problems under uncertain topology using aggregation techniques for exponentially many scenarios. *Annals of Operations Research*, Volume 249, Issue 1, pp 141– 162, February 2017.
- Y. Li, N. Kong, M. Chen*, Q. P. Zheng. Optimal Physician Assignment and Patient Demand Allocation in an Outpatient Care Network. *Computers & Operations Research*, Volume 72, pp. 107-117, August 2016.
- V. Krishnan, J. Ho, B. H. Hobbs, A. L. Liu, J. D. McCalley, M. Shahidehpour, and Q. P. Zheng. Co-Optimization of Electricity Transmission and Generation Resources for Planning and Policy Analysis: Review of Concepts and Modeling Approaches. *Energy Systems*, Volume 7, Issue 6, pp. 297 – 332, May 2016.
- N.C. Onat*, M. Kucukvar, O. Tatari and Q. P. Zheng. Combined Application of Multi-Criteria Optimization and Life Cycle Sustainability Assessment for Optimal Allocation of Alternative Passenger Vehicles in U.S. *Journal of Cleaner Production*, Volume 112, Part 1, pp. 291-307, January 2016.
- Q. P. Zheng, S. Shen and Y. Shi. Loss-Constrained Minimum Cost Flow under Arc Failure Uncertainty with Applications in Risk-Aware Kidney Exchange. *IIE Transactions*, Volume 47, Issue 9, pp. 961-977, July 2015.
- Q. P. Zheng, J. Wang and A. L. Liu. Stochastic Optimization for Unit Commitment – A Review. *IEEE Transactions on Power Systems*, Volume 30, Issue 4, pp. 1913-1924, July 2015.
- C.-L. Tseng, Y. Zhan*, Q. P. Zheng, M. Kumar. A MILP Formulation for Generalized Geometric Programming Using Piecewise-Linear Approximations. *European Journal of Operational Research*, Volume 245, Issue 2, pp. 360 – 370, 2015 September 2015.
- T. Zhang, Q. P. Zheng, Y. Fang*, Y. Zhang. Multi-Level Inventory Matching and Order Planning under the Hybrid Make-To-Order/Make-To-Stock Production Environment for Steel Plants via Particle Swarm Optimization. *Computers & Industrial Engineering*, Volume 87, pp. 238-249, September 2015.

- Z. Huang^{*} and Q. P. Zheng. Decomposition-based Exact Algorithms for Risk-constrained Traveling Salesman Problems with Discrete Random Arc Costs. *Optimization Letters*, Volume 9, Issue 8, pp. 1553-1568, December 2015.
- P. Khadgi, L. Bai, G. Evans and Q. P. Zheng. A Simulation Model with Multi-Attribute Utility Functions for Energy Consumption Scheduling in a Smart Grid. *Energy Systems*, Volume 6, Issue 4, pp. 533-550, November 2015.
- Y. Huang^{*}, Q. P. Zheng and J. Wang. Two-Stage Stochastic Unit Commitment Model Including Non-Generation Resources with Conditional Value-at-Risk Constraints. *Electric Power Systems Research*, Volume 116, pp. 427-438, November 2014.
- Y. Huang^{*}, Q. P. Zheng, N. Fan and K. Aminian. Optimal Scheduling for Enhanced Coal Bed Methane Production through CO₂ Injection. *Applied Energy*, Volume 113, pp. 1475-1483, January 2014.
- Y. Huang^{*}, S. Rebennack and Q. P. Zheng. Techno-Economic Analysis and Optimization Models for Carbon Capture and Storage - A Survey. *Energy Systems*, Volume 4, Number 4, pp. 315-353, December 2013.
- Q. P. Zheng, J. Wang, P. M. Pardalos and Y. Guan. A Decomposition Approach to Two-Stage Stochastic Unit Commitment. *Annals of Operations Research*, Volume 210, Issue 1, pp. 387-410, November 2013.
- N. Fan, Q. P. Zheng and P. M. Pardalos. Robust optimization of graph partitioning involving interval uncertainty. *Theoretical Computer Science*, Volume 447, pp. 53-61, August, 2012.
- Q. P. Zheng and A. Arulselvan. Discrete Time Dynamic Traffic Assignment Models and Solution Algorithm for Managed Lanes. *Journal of Global Optimization*, Volume 51, Number 1, pp. 47-68, 2011.
- T. Zhang, Y. Zhang, Q. P. Zheng and P. M. Pardalos. A hybrid Particle Swarm Optimization and Tabu Search Algorithm for Order Planning Problems of Steel Factory based on the Make-To-Stock and Make-To-Order Management. *Journal of Industrial and Management Optimization*, Volume 7, Number 1, pp. 31-51, 2011.
- Q. P. Zheng and P. M. Pardalos. Stochastic and Risk Management Models and Solution Algorithm for Gas Transmission Network Expansion and LNG Terminal Location Planning. *Journal of Optimization Theory and Applications*, Volume 147, Number 2, pp. 337-357, 2010.
- B. Li, X. Li, W. Liu and Q. Zheng. Dynamic maintenance service management based on exception perception. *Journal of Computer Integrated Manufacturing Systems*, Vol.12, No.08, 1006-5911(2006)08-1308-05, 2006. (In Chinese with an English Abstract)
- Q. Zheng, W. Liu, X. Li and B. Li. "Application of Support Vector Machine in Bank Customer Classification". *Journal of Control & Automation*. 2005 (33) 68-70, 2005. (In Chinese with an English Abstract)

Book Chapters

- Y. Huang^{*}, A. Rahil and Q. P. Zheng. A Quasi Exact Solution Approach for Scheduling Enhanced Coal Bed Methane Production through CO₂ Injection. In *Optimization in Science and Engineering* (edited by Rassias, Themistocles M. and Floudas, Christodoulos A. and Butenko, Sergiy), Springer New York, pp. 247-261, June 2014.
- N. Fan, Q. P. Zheng and P. M. Pardalos. On the two-stage stochastic graph partitioning. In *Combinatorial Optimization and Applications* (edited by Weifan Wang, Xuding Zhu and Ding-Zhu Du), COCOA 2011, Lecture Notes in Computer Science, Volume 6831, pp. 500-509, 2011.

- P. M. Pardalos, Q. P. Zheng and A. Arulsevan. Deterministic Global Optimization. *Wiley Encyclopedia of Operations Research and Management Science* (edited by James J. Cochran), Volume 2, John Wiley & Sons, pp. 1388-1407, 2011.
- Q. P. Zheng, Y. Lou and P. M. Pardalos. Economics of Gambling on Sports: A Multistage Stochastic Programming Approach to American Jai Alai Gambling Strategies. In *Optimal Strategies in Sports Economics and Management*, Sergiy Butenko, Jaime Gil-Lafuente and Panos M. Pardalos (Eds.), pp. 199-215, 2010.
- Q. P. Zheng, S. Rebennack, N. A. Iliadis and P. M. Pardalos. Optimization Models in Natural Gas Industry. Chapter 6 in *Handbook of Power Systems I*, Steffen Rebennack, Panos M. Pardalos, Mario V.F. Pereira and Niko A. Iliadis (Eds.), Energy Systems, Springer, pp. 121-148, 2010.

Conference Proceedings

- L. Bai, G. Xu and Q. P. Zheng. A Game Theoretical Approach to Modeling Energy Consumption with Consumer Preference. *Proceedings of IEEE Power & Energy Society General Meeting 2014*, Washington DC, pp. 1-5, August 2014.
- J. R. Davis, Q. P. Zheng, V. A. Paramygin, B. Tutak, C. Vogiatzis, Y. P. Sheng, P. M. Pardalos, and R. J. Figueiredo. Development of a Multimodal Transportation Educational Virtual Appliance (MTEVA) to study congestion during extreme tropical events. *Proceedings of the Transportation Research Board (TRB) 91st Annual Meeting*, Paper No. 12-1119, pp. 1-19, Washington, D. C., January, 2012.
- W. Liu, Q. Zheng, X. Li and B. Li. "Application of Support Vector Machine in Customer Relationship Management". *Proceedings of the Symposium on Global Manufacturing & Simulation Technology of the 21st Century. Paper No. 7-5062-6822-1 (2004)-B165, Oct. 2004.* (In Chinese with an English abstract)

Book Authored

- *Electrical Power Unit Commitment: Deterministic and Two-Stage Stochastic Programming Models and Algorithms.*
Y. P. Huang*, P. M. Pardalos and Q. P. Zheng
ISBN 978-1-4939-6766-7, Springer, 2016.

Book Edited

- *Handbook of CO₂ in Power Systems.*
Q. P. Zheng, S. Rebennack, P. M. Pardalos, N. A. Iliadis, and M. V. F. Pereira (Eds.)
ISBN 978-3-642-27430-5, Springer, May, 2012.

Other Publications

- "A message from the new editors-in-chief of *Energy Systems*." P. M. Pardalos and Q. P. Zheng, editorial in *Energy Systems*, Volume 9, [Issue 1](#), pp 1–2. February 2018,
- "Co-optimization of Transmission and other Supply Resources." Report prepared for Eastern Interconnection States Planning Council (EISPC) and National Association of Regulatory Utility Commissioners (NARUC), funded by Department of Energy (DoE), Pages 1-213, September 2013. (with A. L. Liu, B. H. Hobbs, J. Ho, J. D. McCalley, V. Krishnan, M. Shahidepour)

WORKS IN PROGRESS

1. Transmission and Generation Capacity Expansion with Unit Commitment - A Multiscale and Multistage Stochastic Mixed Integer Programming Approach. *Under Revision*.
2. A Cutting Plane Method for Risk-constrained Traveling Salesman Problem with Continuously Distributed Random Arc Costs. *Revision under Review*.
3. Robust Pareto optimal approach to sector-specific load specific sustainable fleet composition of U.S. heavy-duty trucks. *Under Review*.
4. Robust Pricing and Boundedly Rational User Equilibrium for Electricity Consumer Market Studies in Smart Grid. *In Revision*.
5. Solving the Robust Toll Pricing Problem with Boundedly Rational Users. *In Revision*.
6. Two-Stage Stochastic Unit Commitment Models with Explicit Reliability Requirements through Conditional Value-at-Risk. *Revision Submitted*.
7. Evacuation Planning via Discrete Dynamic Traffic Assignment with Lane Reversals. *In Revision*.
8. Gas Contract Optimization for Power Plants by Solving Multi-Stage Stochastic Mixed Integer Programming Problems. *In Revision*.
9. Expansion Planning Models for Combined Electrical and Natural Gas Systems. *In preparation*.
10. Discrete-Time Dynamic User Equilibrium and Bounded Rational User Equilibrium. *In preparation*.

FUNDED RESEARCH PROJECTS

- PI: N.-B. Chang; Co-PI: **Q. P. Zheng**, N. Kapucu, L. Gu, P. Fairey.
“(ENLARGE) Enabling Large-Scale Adaptive Integration of Technology Hubs to Enhance Community Resilience through Decentralized Urban Food-Water-Energy Nexus Decision Support.”
Sponsors:
U.S.: National Science Foundation, ICER-1830036
E.U.: Belmont Forum and Urban Europe (EU's Horizon 2020 research and innovation program, No. 730254-ENLARGE)
Partnership with:
U.S.: University of Florida, Florida Solar Energy Center, Southeast Florida Regional Climate Change Compact - Resilient Redesign
Netherlands: Delft University of Technology, Amsterdam Institute for Advanced Metropolitan Solutions
France: Ecofilae, IRSTEA, ECOSEC
Canada: Institute for Catastrophic Loss Reduction (University of Western Ontario).
Budget: \$750,000 in U.S. (€1,072,421 in European Union).
Duration: 7/2018 – 6/2021.
- PI: V. Boginski; Co-PI: **Q. P. Zheng**
“Modeling and Optimization of Networked Systems in Contested Environments.”
Sponsor: Air Force Research Laboratory

Budget: \$2,199,022.

Duration: 07/2016 – 07/2019

- **PI: Q. P. Zheng.**
“Collaborative Research: The Next-Generation Electricity Capacity and Transmission Expansion Model with Large-Scale Energy Storage and Renewable Resources.”
Sponsor: National Science Foundation, CMMI-1234094 (now CMMI-1355939).
Budget: \$172,655.
Duration: 08/2012 - 07/2016.
- **PI: S. Solanki; co-PIs: Q. P. Zheng, J. Solanki, D. Martinelli.**
“Grid Challenges for a Smart Transit System.”
Sponsor: National Science Foundation, ECCS-1232168.
Budget: \$322,501.
Duration: 08/2012 - 07/2016.
- **PI: Q. P. Zheng.**
“Dynamic Traffic Assignment Models with Lane Reversals for Evacuation Planning.”
Sponsor: UCF In-house Research.
Budget: \$7,485.
Duration: 05/2015 – 04/2016.
- **PI: M. Calabrese, co-PI: Q. P. Zheng.**
“USNTPS Optimization of Probabilistic Sortie Model.”
Sponsor: Naval Air Warfare Center Aircraft Division (NAWCAD).
Budget: \$56,190.
Duration: 09/2014 - 08/2015.
- **PI: A. L. Liu (Purdue University); co-PIs: B. F. Hobbs (John Hopkins University), J. McCalley (Iowa State University), M. Shahidehpour (Illinois Institute of Technology), P. T. Sullivan (NREL) and Q. P. Zheng.**
“Whitepaper: Co-Optimization of Transmission and other Supply Resources.”
Sponsor: Department of Energy (Sub-contracted through National Association of Regulatory Utility Commissioners).
Budget: \$150,000.
Duration: 02/2013 - 9/2013.
- **PI: Q. P. Zheng.**
“Robust Minimum Cost Flows via Risk Measures.”
Sponsor: NASA WV Space Grant Consortium.
Budget: \$26,139.
Duration: 08/2011 - 07/2012.

HONORS AND AWARDS

- UCF TIP (Teaching Incentive Program) Award, 2018.
- AFRL Summer Faculty Fellowship Program, 2016.
- IIE New Faculty Colloquium participant, May, 2011.
- [Best Presentation Award](#), CMS Annual Student Conference, March, 5, 2010.

- INFORMS, Future Academician Colloquium participant, Nov, 2009.
- Academic Excellence Scholarships, NCUT, China, 1997-2001.
- Honor Prize of Physics Thesis, NCUT, China, 1998.

CONFERENCE AND INVITED PRESENTATIONS AS THE SPEAKER

- “A Cutting Plane Method for Risk-constrained Traveling Salesman Problem with Continuously Distributed Random Arc Costs,” Global Optimization Conference at Texas A&M University, College Station, TX, March 2017.
- “An Accelerated Extended Cutting Plane Approach with Piecewise Linear Approximations for Signomial Geometric Programming,” Air Force Research Lab at Eglin and REEF at University of Florida Research Seminar, Shalimar, FL, July 2016.
- “A Multistage Stochastic Model for Natural Gas Contract and Maintenance Scheduling of Power Plants,” POMS 27th Annual Conference, Orlando, FL, May 2016.
- “Nested Decomposition for Multi-stage and Multi-scale Stochastic Expansion Planning of Power Systems,” Department of Systems and Industrial Engineering, University of Arizona, Graduate Seminar, Tucson, Arizona, April 2016.
- “Stochastic Optimization for Unit Commitment – A Review,” INFORMS Annual Meeting, San Francisco, CA, November, 2014.
- “Multistage Stochastic Models for Natural Gas Contract and Maintenance Scheduling of Power Plants,” INFORMS Annual Meeting, Minneapolis, MN, October, 2013.
- “Reliable routing under independent random arc failures and decomposition algorithm with scenarios reduction,” INFORMS Annual Meeting, Phoenix, AZ, October, 2012.
- “Minimum Cost Flow Problems with Value-at-Risk and Conditional Value-at-Risk Flow Losses under Topological Uncertainty,” Air Force Research Lab/UF REEF Seminar, Shalimar, FL, July, 2012.
- “Multi-Level Inventory Matching and Order Planning for Steel Plants via Particle Swarm Optimization,” IIE ISERC Annual Conference, Orlando, FL, May, 2012.
- “Compare Spinning Reserves and Risk Management Models for Stochastic Network-based Security Constrained Unit Commitment”, IIE ISERC Annual Conference, Orlando, FL, May, 2012.
- “Reliable Routing under independent random arc failures”, 4th International Conference on the Dynamics of Information Systems, Gainesville, FL, February, 2012.
- “Transmission and Generation Capacity Expansion with Unit Commitment – A Multiscale Stochastic Model”, INFORMS Annual Meeting, Charlotte, NC, November, 2011.
- “Stochastic Security Constrained Unit Commitment with Chance Constraints”, IIE IERC Annual Conference, Reno, NV, May, 2011.
- “Stochastic Security-Constrained Unit Commitment Models and Solution Algorithm”, Department of Integrated Systems Engineering, Ohio State University, Columbus, OH, January, 2011.
- “Stochastic Security-Constrained Unit Commitment Models and Solution Algorithm”, INFORMS Annual Meeting, Austin, TX, November, 2010.
- “Advancing Scheduling Models for Real-Time Disaster Evacuation”, Center for Multimodal Solutions and Congestion Mitigation, Annual Student Conference, Gainesville, March, 2010. ([Best Presentation](#))

Award)

- “Risk Management Models and Solution Algorithm for Gas Transmission Network Expansion and LNG Terminal Location Planning”, INFORMS Optimization Society, Conference on Energy, Sustainability and Climate Change, Gainesville, February, 2010.
- “Risk Management Models of Natural Gas Contracts Portfolio Optimization for Gas Power Plants.” INFORMS Annual Meeting, San Diego, October, 2009.
- “Natural Gas Transportation Network Expansion and LNG Terminal Location Planning Models.” INFORMS Annual Meeting, San Diego, October, 2009.
- “The Order Planning Method of Steel Factory Based on the MTO-MTS Management Architecture.” INFORMS Annual Meeting, San Diego, October, 2009.
- “Gas Contract Optimization by Solving Multi-Stage Stochastic Mixed Integer Programming Problems.” Power Systems Modeling 09, Gainesville, March 2009.
- “Dynamic Network Equilibrium and Bounded Rational Equilibrium.” INFORMS Annual Meeting, Washington DC, October 2008.
- “Discrete-Time Dynamic Traffic Assignment Model for Managed Lanes.” CMS Annual Student Conference, University of Florida, Gainesville, FL, March 2008.
- “Discrete-Time Dynamic Traffic Assignment Model for Managed Lanes.” INFORMS Annual Meeting, Seattle, WA, November 2007.

CONFERENCE AND INVITED PRESENTATIONS AS A CONTRIBUTING AUTHOR

- “Two-Stage Stochastic Unit Commitment Models with Explicit Reliability Requirements through Conditional Value-at-Risk,” Federal Energy Regulatory Commission (FERC) Sixth Annual Software Conference, June 2015.
- “An Equilibrium Model for Distributed Energy Consumption Scheduling in Smart Grid,” INFORMS Annual Meeting, Minneapolis, MN, October, 2013.
- “Generation and Transmission Maintenance Scheduling Considering Renewable Energy,” INFORMS Annual Meeting, Minneapolis, MN, October, 2013.
- “Optimal Physician Traveling Assignment for Improving Care Access in an Outpatient Care Network,” INFORMS Annual Meeting, Minneapolis, MN, October, 2013.
- “Regulation Energy Management in Renewable Integration Market with Non-Generation Resources,” INFORMS Annual Meeting, Minneapolis, MN, October, 2013.
- “Stochastic Security-Constrained Unit Commitment Models Including Energy Storage and Demand Response with Risk Control,” INFORMS Annual Meeting, Phoenix AZ, October, 2012.
- “Utilizing Multi-Attribute Utility Functions and Simulation to Model Load Leveling in Smart Grid,” INFORMS Annual Meeting, Phoenix AZ, October, 2012.
- “A Method for Two-Stage Stochastic Programming with Mixed 0-1 Integer Second Stage”, IIE ISERC Annual Conference, Orlando, FL, May, 2012.
- “Expansion Planning for Combined Electricity and Natural Gas Systems”, INFORMS Annual Meeting, Charlotte NC, November, 2011.
- “Optimal Scheduling for Enhanced Coal Bed Methane Production Through CO₂ Injection,” IERC

Annual Conference, Reno, NV, May, 2011.

- “Decomposition Methods for Solving the Two-stage Stochastic Graph Partitioning Problem,” INFORMS Annual Meeting, Austin TX, November, 2010.

TEACHING EXPERIENCE

“[□]” denotes a graduate course.

@University of Central Florida

- ESI6938, Stochastic Optimization – Models, Algorithms and Applications[□], Spring 2016
- ESI6418, Linear Programming and Extensions[□], Spring 2015, 2017
- ESI 6247, Experimental Design[□], Spring 2018
- ESI5306, Operations Research[□], Summer 2015, Fall 2013, 2015, 2017, 2018
- ESI4312, Operations Research, Fall 2016
- ESI4312, Operations Research I – Deterministic Methods, Fall 2017
- ESI4313, Operations Research II – Stochastic Methods, Spring 2018
- ESI4221, Empirical Methods for Industrial Engineering, Spring 2014, Fall 2014
- STA 3032H, (Honors) Probability and Statistics for Engineers, Fall 2015, 2016

@West Virginia University

- IENG593G, Nonlinear Programming[□], Spring 2012
- IENG350, Introduction to Operations Research, Fall 2010, Spring 2011, Fall 2011 and Fall 2012
- IENG446, Facility Planning and Material Handling, Spring 2013

@University of Florida

- ESI4567, Numerical and Matrix Analysis, Summer 2009 and Fall 2009
- EIN4354, Engineering Economy, Spring 2009

INDUSTRIAL EXPERIENCE

- Feb.2002– Sep.2002, System Design and Software Engineer in Sino-Electronic Future Telecommunication Company Ltd, Beijing, P.R. China.

I was responsible for the software design of the power-on initialization, phone status settings, and SMS (Short Message Service) modules using C and C++ language.

PROFESSIONAL ACTIVITIES

- **Co-Editor-In-Chief**
 - *Energy Systems, Springer. (2018 – Present)*
- **Associate Editor**
 - *Energy Systems, Springer. (2010 – 2017)*
- **Article Referee for**

- *Annals of Operations Research*, Springer;
- *Applied Energy*, Elsevier;
- *Computers & Industrial Engineering*, Elsevier;
- *Computers & Operations Research*, Elsevier;
- *Energy Policy*, Elsevier;
- *Energy Systems*, Springer;
- *Environmental Modeling & Assessment*, Springer;
- *European Journal of Operational Research*, Elsevier;
- *IISE Transactions*, Taylor & Francis;
- *IEEE Transactions on Automation Science and Engineering*, IEEE;
- *IEEE Transactions on Power Systems*, IEEE;
- *IEEE Systems Journal*, IEEE;
- *International Journal of Energy Sector Management*, Emerald;
- *International Journal of Operational Research*, InderScience;
- *Journal of Combinatorial Optimization*, Springer;
- *Journal of Global Optimization*, Springer;
- *Journal of Industrial & Management Optimization*, American Institute Mathematical Sciences;
- *Journal of Intelligent Manufacturing*, Springer;
- *Journal of Optimization Theory and Applications*, Springer;
- *Journal of Systems Science and Systems Engineering*, Springer;
- *Journal of Transportation Safety & Security*, Taylor & Francis;
- *Mathematical Methods of Operations Research*, Springer;
- *Networks*, Wiley;
- *Networks and Spatial Economics*, Springer;
- *Optimization and Engineering*, Springer;
- *Optimization Letters*, Springer;
- *PLOS ONE*,
- *Transportation Research Part C*, Elsevier;
- *Several books, etc.*
- **Session Chair of**
 - Advances in Manufacturing and Supply Chain Operations, POMS 27th Annual Conference, Orlando, FL, May 2016.
 - Bi- and Multi-Level Optimization in Energy Systems, INFORMS Annual Meeting, Philadelphia, PA, Nov 2015.
 - Smart Grid Integration and Analysis in the New Electrical Era, INFORMS Annual Meeting, Minneapolis, MN, Oct, 2013.
 - New Models and Algorithms for Power Grid Transmission, INFORMS Annual Meeting, Phoenix, AZ, Oct, 2012.
 - Energy System Planning with Smart Grid Challenges, IIE Annual Conference and Expo, ISERC Annual Conference, May, 2012.
 - Integrated Production Planning and Inventory Control, IIE Annual Conference and Expo, ISERC

- Annual Conference, May, 2012.
- Long-Term Power Systems Planning with New Features of Smart Grids, INFORMS Annual Meeting, Charlotte, NC, Nov, 2011.
- Scheduling Problems in Various Areas, IIE 61st Annual conference and Expo, IERC Annual Conference, May, 2011.
- Power System Planning, IIE 61st Annual conference and Expo, IERC Annual Conference, May, 2011.
- Conference on Systems and Optimization Aspects of Smart Grid Challenges, Gainesville, FL, April, 2011.
- Risk Management and Stochastic Programming in Natural Gas and Power Systems, INFORMS Annual Meeting, Austin, TX, 2010.
- **Conference Co-organizer of**
 - Co-organizer of 5th Annual Meeting of the AFRL Mathematical Modeling and Optimization Institute, Eglin AFB, August 1st – August 3rd, 2017.
 - Local Organizing Committee member and Session Chair for the Conference on Energy, Sustainability and Climate Change, INFORMS Optimization Society, Gainesville, FL, 2010,
 - Local Organizing Committee member for the Conference of Power Systems Modeling, Gainesville, FL, 2009.
- Academic Society Member of
 - Mathematical Optimization Society (MOS, formerly MPS),
 - INFORMS,
 - IEEE, Power and Energy Society,
 - International Society of Global Optimization,

STUDENTS

Current PhD Students

- Mengnan Chen (at UCF), started in August 2014, and expects to graduate in August 2019.
- Guanxiang Yun (at UCF), started in Spring 2015, and expects to graduate in August 2019.
- Jennifer Qiang (at UCF), started in Spring 2017, and expects to graduate in August 2021.
- Cheng-Lung Chen (at UCF), starts in Fall 2017, and expects to graduate in August 2021.
- Shima Al-Quradaghi (at UCF), starts in Spring 2018, and expects to graduate in August 2021.

Graduated PhD Students as the Chair of the Committee

- Alaleh Razmjoo (PhD at UCF) graduated in August 2018.
Dissertation Title: Methods for Online Feature Selection for Classification Problems.
- Yiduo Zhan (PhD at UCF) graduated in December 2016.
Dissertation Title: Optimization Approaches for Electricity Generation Expansion Planning Under Uncertainty.
First Placement: Monsanto Company.
- Zhouchun Huang (PhD at UCF) graduated in August 2016.
Dissertation Title: Stochastic Optimization for Integrated Energy System with Reliability Improvement Using Decomposition Algorithms.

First Placement: Sabre Corporation.

- Yuping Huang (PhD at UCF) graduated in December 2014.
Dissertation Title: Stochastic Optimization for Integrated Energy System with Reliability Improvement Using Decomposition Algorithms.
First Placement: Monsanto Company.
- Ramazan Unlu (PhD at UCF, co-advise with Dr. Petros Xanthopoulos) graduated in Spring 2017.
Dissertation Title: Weighting Policies for Robust Unsupervised Ensemble Learning.

Graduated Master Students with Thesis

- Nuri Onat (at UCF), graduated in August 2015.
Thesis Title: “A Macro-Level Sustainability Assessment Framework for Optimal Distribution of Alternative Passenger Vehicles.”
- Yixin (Justin) Du (at WVU), graduated in August 2014.
Thesis title: “Optimal Scheduling of Power Plant Maintenance with Gas Portfolio.”
- Yeh Ern Poh (M.S. WVU), graduated in August 2013.
Thesis title: “Discrete Time Dynamic Traffic Assignment Models with Lane Reversals for Evacuation Planning.”
- Yuping Huang (M.S. WVU), graduated in August 2011.
Thesis title: “Optimal Scheduling for Enhanced Coal Bed Methane Production through CO2 Injection.”