Ashkan Mirzaee

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Education

Ph.D., Industrial Engineering and Operations Research   December 2020
Minor, Statistics
University of Missouri, Columbia, MO

- Advisor: Dr. Ronald G. McGarvey

M.S., Industrial Engineering and Operations Research   May 2017
University of Missouri, Columbia, MO

B.S., Industrial Engineering   December 2010
Azad University, Arak, Iran

Experience

Graduate Research Assistant   February 2016 - present
University of Missouri, Columbia, MO

- Developing a robust optimization model to identify minimum-cost electricity generation approaches that reduce GHG emissions through co-firing woody biomass with coal and natural gas
- Performed linear and spatial panel analysis to estimate the impact of biopower demand on forest attributes in the Eastern US
- Developed a SQL database for the large data analysis of the US Forest Inventory data-sets
- Conducted research on logistics and supply chain systems with respect to optimizing inventory levels for Anheuser-Busch
- Analyzed over twenty million sales records of Anheuser-Busch supply chain to improve safety stock forecasting methods

Industrial Engineering Operations Specialist   March 2016 - January 2017
EternoGen Aesthetics, Columbia, MO

- Performed statistical learning analysis to predict the features impact on the product
- Collaborated with operations team to implement ISO 13485 quality requirements
- Built the database management system for procurement

Graduate Teaching Assistant   January 2015 - January 2016
University of Missouri, Columbia, MO

- Teaching assistant for Engineering Statistic, Manufacturing and Supply Systems, Energy Efficiency and Natural Resources Policy courses
- Delivered lectures and discussions, conducted exams, and helped students with R programming and Minitab

Programming Skills

R, Python, SQL Server, PostgreSQL, GAMS, Gurobi, ArcMap, SIMIO, LaTeX, Markdown

Presentations and Publications

- Woody Biomass Use for Biopower and Its Impact on Forest Resources, INFORMS Annual Conference, November 2018, Phoenix, AZ

- Statistical Model to Consider Use of Woody Biomass Impacts on Forest, COMPARE, June 2018, Columbia, MO

- A Multiple Traveling Salesman Problem Model for Unmanned Aerial Vehicles Routing, INFORMS Annual Conference, October 2017, Houston, TX

- Modeling the Unmanned Aerial Vehicle Routing Problem with Time Windows, ASEM International Annual Conference, October 2017, Huntsville, Al

- Shortest Path Algorithm in the Presence of Polyhedral Forbidden Regions, IISE Annual Conference, May 2017, Pittsburgh, PA

- Calculating Optimal Safety Stock Levels, CELDi Conference, October 2016, Columbia, MO

- Alternative Methods for Calculating Optimal Safety Stock Levels, CELDi Conference, April 2016, Atlanta, GA

Honors and Awards

- Innovative Design Competition, 1st place award ($1,500), IISE Annual Conference, May 2017

- Mizzou Advantage Graduate Award ($600), University of Missouri, April 2017

- Outstanding IMSE Masters Student Award, University of Missouri, March 2017

- GIA Award Scholarship ($10,000), University of Missouri, January 2017

- Institute for Operations Research and the Management Sciences (INFORMS)

- Institute of Industrial and Systems Engineers (IISE)

- Alpha Pi Mu, the Industrial Engineering Honor Society

- Graduate Professional Council, Student Affairs Committee, 2015