

# Khatereh Ahadi | CV

## Education

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### University of Arkansas

Fayetteville, AR

*Ph.D. in Industrial Engineering, GPA – 3.9/4.0*

2013–2018

Advisor: Dr. Kelly M. Sullivan

Thesis Title: Optimally selecting maintenance activities for complex systems

### Sharif University of Technology

Tehran, Iran

*Master of Science in Industrial Engineering, GPA – 17.49/20.0*

2010–2012

Advisor: Dr. Farhad Ghassemi

Thesis Title: The inter-cell layout problem in cellular manufacturing systems

### Sharif University of Technology

Tehran, Iran

*Bachelor of Science in Industrial Engineering, GPA – 16.87/20.0*

2006–2010

## Research Interests

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Applied Operations Research

Data Analytics

Supply Chain Management

Large-scale Optimization

Transportation

## Teaching Interests

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Probability and Statistics

Operations Research

Operations Management

Supply Chain Management

## Publications

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Under Review.....

**Ahadi, K.**, K.M. Sullivan and K.N. Mitchell. “Budgeting maintenance dredging projects under uncertainty to improve the inland waterway network performance”. Submitted to *Transportation Research Part E: Logistics and Transportation Review*.

Ghassemi, F. and **K. Ahadi**. “Cellular layout design using Tabu search, a case study”. Submitted to *RAIRO-Operations Research*

Working Paper.....

**Ahadi, K.** and K.M. Sullivan. "An approximate dynamic programming approach for selective maintenance in multi-component systems", In progress

Technical Report.....

K.M. Sullivan, **Ahadi, K.** (2017). "Efficient Dredging Strategies for Improving Transportation Infrastructure Resilience". *Maritime Transportation Research and Education Center (MarTREC), University of Arkansas*.

## Teaching Experience

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**Spring 2018: Teaching assistant** for Engineering Economic Analysis, Instructed by Dr. Tish Pohl, Department of IE, University of Arkansas

- *Instructing drill sessions for 90 students*

**Fall 2017: Teaching assistant** for Engineering Economic Analysis, Instructed by Dr. John White, Department of IE, University of Arkansas

- *Instructing drill sessions for 84 students*

**Summer 2017: Instructor:** for INEG 2413: Engineering Economic Analysis, Department of IE, University of Arkansas

- *Received course evaluation rating: 4:36 out of 5, Course GPA: 3.51 out of 4*
- *Prepared lectures, review sessions, tests, assignments, and quizzes*
- *Used online learning environment Blackboard*
- *Incorporated response technology for receiving immediate feedback from students*

**Spring 2017: Teaching assistant** for Applied Probability and Statistics for Engineers 1, Instructed by Dr. Kelly Sullivan, Department of IE, University of Arkansas

- *Instructing drill sessions for 94 students*

**Spring 2013: Teaching assistant** for Applied Probability and Statistics for Engineers 1, Instructed by Dr. Kelly Sullivan, Department of IE, University of Arkansas

- *Instructing drill sessions for 75 students*

**Spring 2011: Teaching Assistant** for Management Information Systems, Department of IE, Sharif University of Technology

**Spring 2011: Teaching Assistant** for Computers and Data and Information Management (Graduate course), Instructed by Dr. Nasser Salmasi, Department of IE, Sharif University of Technology

**Fall 2011: Teaching Assistant** for Operations Research (Undergraduate course), Instructed by Prof. Koroush Eshghi, Department of IE, Sharif University of Technology

**Fall 2011: Teaching Assistant** for Probability and Statistics (Undergraduate course), Instructed by Prof. Hashem mahlooji, Department of IE, Sharif University of Technology

**Spring 2010: Teaching Assistant** for Advanced Manufacturing Processes, Instructed by Prof. Mahmoud Hoshmand, Department of IE, Sharif University of Technology

**Spring 2010: Lab Instructor**, Instructing lab sessions of FESTO Fluidsim and Step 5 software, Department of IE, Sharif University of Technology

**Fall 2010: Teaching Assistant** for Advanced Linear Programming, Instructed by Dr. Nasser Salmasi, Department of IE, Sharif University of Technology

**Fall 2010: Teaching Assistant** for Plant Layout, Instructed by Dr. Mohammadreza Akbari, Department of IE, Sharif University of Technology

## Research Experience

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**2014–Present:** Graduate Research Assistant, University of Arkansas, Supervisor: Dr. Kelly Sullivan

- Developed efficient dredging strategies for improving transportation infrastructure resilience
- Financially Supported by: U.S. Department of Transportation under Grant Award Number DTRT13-G-UTC50

**2013–2014:** Graduate Research Assistant, University of Arkansas, Supervisor: Dr. Kelly Sullivan

- Research: Developing an approximate dynamic programming approach for selective maintenance in multi-component systems
- Financially Supported by: Department of Industrial Engineering, University of Arkansas

## Conference and Poster Presentations

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**Ahadi, K.** and K.M. Sullivan. A Stochastic Programming Approach for Selecting Inland Waterway Maintenance Projects under Consideration of Random Disruptions, Industrial and Systems Engineering Research Conference, Pittsburgh, PA, May 2017.

**Ahadi, K.** and K.M. Sullivan. A Stochastic Programming Approach for Selecting Inland Waterway Maintenance Projects, INFORMS Annual Meeting, Nashville, TN, November 2016.

**Ahadi, K.** and K.M. Sullivan. Efficient Dredging Strategies for Improving Transportation Infrastructure Resilience, MarTrec Poster Competition, Fayetteville, AR, November 2016.

**Ahadi, K.** and K.M. Sullivan. Selecting Inland Waterway Maintenance Projects under Consideration of Random Disruptions, Industrial and Systems Engineering Research Conference, Anaheim, CA, May 2016.

**Ahadi, K.** and K.M. Sullivan. Selecting Inland Waterway Maintenance Projects under Consideration of Random Disruptions, INFORMS Annual Meeting, Philadelphia, PA, November 2015.

**Ahadi, K.** and K.M. Sullivan. Selecting Inland Waterway Maintenance Projects under Consideration of Random Disruptions, Industrial and Systems Engineering Research Conference, Nashville, TN. May 2015.

**Ahadi, K.** and K.M. Sullivan. Efficient Dredging Strategies for Improving Transportation Infrastructure Resilience , MarTrec Poster Competition, Fayetteville, AR, November 2015.

**Ahadi, K.** and K.M. Sullivan. Age-based preventive maintenance in multi-component systems: An integer programming approach, INFORMS Annual Meeting, San Francisco, CA, November 2014.

**Ahadi, K.** and K.M. Sullivan. Efficient Dredging Strategies for Improving Transportation Infrastructure Resilience, MarTrec Poster Competition, Fayetteville, AR, November 2014.

## Honors and Awards

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**Summer 2017:** Scholarship Award, Graduate School, University of Arkansas (\$3000)

**Fall 2016:** First Place Award, Research Poster Competition, Maritime Transportation and Education Center (MarTREC)

**Spring 2012:** Outstanding Teaching Assistant Award, Department of IE, Sharif University of Technology

**2010:** Top 10% of 92 B.Sc. students in the Department of IE, Sharif University of Technology, Sharif University of Technology

**2010:** Identified as an **exceptionally talented** student at Sharif University of Technology and granted permission to study for the Master's degree without taking the entrance exam

**2006:** Ranked 2nd in the state and 633th nationwide in the university entrance exam in Iran

## Extracurricular Experience

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**2016–2017:** **Secretary** of "INFORMS Student Chapter" in Industrial Engineering Department, University of Arkansas

- Held seminar series on various subjects in the IE department
- Organized an academic/industry job search panel discussion
- Held and supported a High Performance Computation (HPC) & CPLEX workshop
- Organized presentation practice sessions for IISE & INFORMS conferences

**2010–2011:** **Treasurer** of Industrial Engineering Magazine, Department of IE, Sharif University of Technology