MARYAM KHEIRANDISH BORUJENI

4120 Bell Engineering Center, Fayetteville, AR 72701 • Phone # (949) 232-5134 • email
mkheiran@uark.edu

EDUCATION

UNIVERSITY OF ARKANSAS   Fayetteville, AR
    Ph.D. Candidate in Industrial Engineering   From 2019
    GPA: 4.0/4.0

IRAN UNIVERSITY OF SCIENCE & TECHNOLOGY   Tehran, Iran
    M.S. in industrial engineering   2012-2014
    Thesis topic: "A Case-based Reasoning for Chemical Reliability Model Selection''
    GPA: 18.21/20.0

IRAN UNIVERSITY OF SCIENCE & TECHNOLOGY   Tehran, Iran
    B.S. in Industrial and System Engineering   2008-2012
    GPA: 17.52/20.0

RESEARCH INTERESTS

Mathematical modeling of stochastic systems with an emphasis on statistical and decision analysis as applied to health care and other service environments.

Methodology: stochastic processes, (partially observable) Markov decision process, simulation, statistical modeling, and machine learning

Applications: medical decision making, health policy and disparities research, process improvement in health care, inventory analysis, transportation

PUBLICATIONS

Journal Papers

Kheirandish, M., Catanzaro, D., Crudu, V., & Zhang, S. (2022). Integrating landmark modeling framework and machine learning algorithms for dynamic prediction of tuberculosis treatment outcomes. Journal of the American Medical Informatics Association, 29(5), 900-908., https://doi.org/10.1093/jamia/ocac003

Aeenparast, A., **Kheirandish, M.**, Maftoon, F., & Farzadi, F. (2017). Identifying key variables for designing a scheduling system for outpatient appointments: A systematic review. Payesh (Health Monitor), 16(6), 735-745. -In Farsi

Conference Articles

Milanloui, S., **Kheirandish, M**., Noorossana, R. (2014), A Hybrid Approach from Datamining Techniques and Six Sigma Methodology, The 10th International Industrial Engineering Conference (2014)-In Farsi

Working Papers

Developing Boosting Algorithms for Uncertain Predictors to Predict Tuberculosis Treatment Outcomes, Considering Error of Diagnostic Laboratory Tests

PRESENTATIONS

Kheirandish, M, "*Dynamic Prediction of Tuberculosis Treatment Outcomes*", 2020 INFORMS Annual Meetings, Virtual

Kheirandish, M, "Effect of Clinical Measurement Errors on Tuberculosis Treatment Outcome Prediction", 2021 INFORMS Annual Meetings, Anaheim, CA

Kheirandish, M, "A Deep Learning Model on Tuberculosis Treatment Outcomes Prediction Using Irregular Longitudinal Data", 2022 IISE Annual conference, Seattle, WA

Kheirandish, M, "A model for Tuberculosis treatment planning using laboratory test results", 2022 INFORMS Annual Meetings, Indianapolis, IN

TEACHING EXPERIENCE

Instructor, INEG2333, Applied Probability and Statistics for Engineers II, University of Arkansas, Summer 2022
  Course-based evaluation score: **4.04/5**

Graduate Teaching Assistant, INEG 3313, Engineering Probability and Statistics-Online course, University of Arkansas, Spring 2020
  Teaching Drill lectures
  Grading Homework Using Grading Online Tools (Gradescope)
  Holding Online Exams Using ProctorU

Graduate Teaching Assistant, Industrial Engineering: Probability Theory and Statistics, Sharif University of Technology, Fall 2014 to Spring 2017

Instructor, Industrial Engineering: Basic computer skills, Sharif University of Technology, Fall 2016

Graduate Teaching Assistant, Industrial Engineering: Design of Experiments, Sharif University of Technology, Fall 2015

Graduate Teaching Assistant, Industrial Engineering: Queueing Theory, Iran University of Science and Technology, Fall 2014 to Fall 2016

Instructor, Industrial Engineering: Probability Theory and Statistics, Binesh Private Higher Education Institution, Summer 2012 to Summer 2016
    Nominated by students to teach the course and mentor students to get admission for Master program

MENTORING AND ADVISING EXPERIENCE

Mentoring an undergraduate student on her honors thesis, University of Arkansas, Summer 2019
    She successfully published her thesis titled "Data Visualization of Treatment Outcomes for Tuberculosis Patients". She got hired as an Administrative Specialist in industrial engineering department, University of Arkansas after graduation.

Mentoring a visiting summer student on his project, University of Arkansas, Summer 2019

AWARDS AND SCHOLARSHIPS

John Imhoff Scholarship, Institute of Industrial and Systems Engineering, 2023

Finalist of DAIS Data Challenge, Institute of Industrial and Systems Engineering, 2023

Graduate Research Award, University of Arkansas, Industrial Engineering, 2021

   Annual department-wide award based on valuable research efforts. Nominees are nominated and voted by faculty.

Academic Excellence Award, University of Arkansas, Industrial Engineering, 2021

   Annual department-wide award based on successful performance toward degree completion.

AAIE Kim and William Needy Scholarship, University of Arkansas, Industrial Engineering, 2021

AAIE G. Kent Burnett Scholarship, University of Arkansas, Industrial Engineering, 2021

LEADERSHIP AND PROFESSIONAL SERVICE

President, INFORMS Student Chapter, University of Arkansas, 2022

Graduate Student Ambassador, Industrial Engineering department, University of Arkansas, 2022

Member, the Institute for Operations Research and the Management Sciences (INFORMS), 2019 to Present

Member, the Institute of Industrial and Systems Engineers (IISE), 2021 to Present

Reviewer, Health Systems journal, 2021

Session Co-Chair, INFORMS annual meeting, 2021

REFERENCES

Shengfan Zhang
Associate Professor of Industrial Engineering
4207 Bell Engineering Center, University of Arkansas, Fayetteville, AR 72701
shengfan@uark.edu

Donald Catanzaro
Research Assistant Professor of Biological Sciences
601 science and Engineering, University of Arkansas, Fayetteville, AR 72701
dgcatanz@uark.edu

Manuel Rossetti
Professor of Industrial Engineering
Director of Data Science Program for the College of Engineering, Walton College of
 Business, and Fulbright College of Arts & Sciences
College of Engineering, 4183 Bell Engineering Center, Fayetteville, AR 72701
rossetti@uark.edu

Haitao Liao
Professor of Industrial Engineering
4183 Bell Engineering Center, University of Arkansas, Fayetteville, AR 72701
liao@uark.edu