Ali Hassanzadeh, PhD

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Academic Positions

Assistant Professor in Management Science

August 2021 - Present

Alliance Manchester Business School, The University of Manchester, United Kingdom

Education

Ph.D., Operations and Decision Technologies

July 2021

Paul Merage School of Business, University of California Irvine, Irvine, CA

Dissertation: "New Operations Research Models for Emerging Problems in Production, Service, and Sports" Advisors: Dr. John Turner, Dr. Luyi Gui

M.Sc., Industrial Engineering

July 2015

College of Engineering, Koç University, Istanbul, Turkey

Thesis: "Optimization-based Algorithms for the Graph Partitioning Problem"

Advisor: Dr. Emre Alper Yıldırım

B.Sc., Industrial Engineering

June 2013

Department of Industrial Engineering, Sharif University of Technology, Tehran, Iran

Advisor: Dr. Hashem Mahlooji

Research & Teaching Interests

Applied Operations Research \bullet Data-driven Optimization \bullet Combinatorial Optimization \bullet Stochastic Optimization \bullet Business Analytics \bullet Machine Learning \bullet Graph Theory \bullet Algorithm Design \bullet Resource Sharing \bullet Sports Analytics \bullet Energy Analytics

Research Experience

Publications

- Hassanzadeh A., Hosseini M., Turner J. (2024). How to Conclude a Suspended Sports League? Manufacturing & Service Operations Management, Volume 26, Issue 5. (doi.org/10.1287/msom.2022.0558)
- Shiri D., Akbari V., Hassanzadeh A. (2024) **The Capacitated Team Orienteering Problem: An online optimization framework with predictions of unknown accuracy**, *Transportation Research Part B: Methodological*, Volume 185, July 2024, 102984. (doi.org/10.1016/j.trb.2024.102984)
- Taherkhani Gita, Hosseini Mojtaba, Hassanzadeh A. Exact solution method for multi-stakeholder freight transportation systems under uncertainty, under review at *Transportation Research Part B: Methodological*
- Salmasi N., Hassanzadeh A. Optimal Scheduling Solutions through Constraint Enhancement for Minimizing Breaks in Round Robin Sports Competitions, under review at Omega
- Hassanzadeh A., Razavi A., Asadi R. (2018) Predicting Changes in Stock Market Indices Using Daily News Headlines, available at SSRN (ssrn.com/abstract=3685530)
- Hassanzadeh A., Davari Morteza, Goossens Dries **Redefining NBA Divisions: A Blueprint for NBA Expansion**, under submission at *European Sport Management Quarterly*

Research in Progress

- "A Logic-based Benders Decomposition Approach for the Capacitated Team Orienteering Problem with Stochastic Travel Times", manuscript under preparation, with Davood Shiri and Vahid Akbari
- Analysis of Pricing Mechanisms under the Resource Exchange Economy, working Paper, with John Turner and Luyi Gui
- A Benders Decomposition Algorithm for the Minimum Graph Partitioning Problem, working paper, with Mojtaba Hosseini and Emre Alper Yıldırım

Invited Talks in Academic Institutions

1. Redefining NBA Divisions: A Blueprint for NBA Expansion Workshop on Fairness in Sports, Ghent University, Ghent, Belgium Joint talk with Morteza Davari & Dries Goossens

June 11, 2024

2. How to Conclude a Suspended Sports League?
School of Mathematics, The University of Edinburgh, Edinburgh, Scotland, UK Invited by Emre Alper Yıldırım

June 19, 2024

3. Three Sports-related Prescriptive Analytics Studies
Department of Business Administration, University of Zurich, Zurich, Switzerland
Invited by Professor Christiane Barz

February 27, 2023

4. How to Conclude a Suspended Sports League?

Centre in Optimisation Technologies, Integrated Methodologies, and Applications (OPTIMA), University of Melbourne (Online Seminar)

Invited by Hamideh Anjomshoa

February 8, 2023

 Applications of Predictive and Prescriptive Analytics in Sports University of Nottingham Business School, Nottingham, UK Invited by Vahid Akbari

November 16, 2022

6. How to Conclude a Suspended Sports League? CORAL Seminar Series, Department of Economics and Business Economics, Aarhus Business School, Aarhus, Denmark Invited by Professor Marcel Turkensteen
April 22, 2022

7. How to Conclude a Suspended Sports League?

IÉSEG School of Management, Lille, France (Online Seminar)

Invited by Tanja Mlinar

8. How to Conclude a Suspended Sports League?

April 21, 2022

Sports—Training and Research in DAta ScIence Methods for ANalytics and INjury Prevention Group (S-TRAINING) (<u>Online Seminar</u>)
Invited by Christophe Ley

April 8, 2022

9. Analysis of Pricing Mechanisms in Optimizing Efficiency Ratio in Resource Exchange Economy
Faculty of Engineering, Lund University, Lund, Sweden
Invited by Professor Johan Marklund

December, 2019

10. Analysis of Pricing Mechanisms in Optimizing Efficiency Ratio in Resource Exchange Economy CORAL Seminar Series, Department of Economics and Business Economics, Aarhus Business School, Aarhus, Denmark

Invited by Ata Jalili Marand

November, 2019

Seminars at Alliance Manchester Business School

1. How to Conclude a Suspended Sports League?

Decision and Cognitive Sciences Research Centre (DCSRC)

March 30, 2022

2. Beyond Suspension: A Two-Phase Methodology for Concluding Sports Leagues Brown Bag Seminar Series, Management Science and Marketing Division Alliance Manchester Business School, Manchester, UK

November 24, 2021

Professional Memberships

• Decision and Cognitive Sciences Research Centre (DCSRC)	2022-present
Alliance Manchester Business School, Academic Staff Member	
• Institute of Operations Research and the Management Sciences (INFORMS)	2016-present
• Production and Operations Management Society (POMS)	2021-present
• The Operational Research Society (OR Society)	2021-present
• The Association of European Operational Research Societies (EURO)	2021-present

Professional Honors and Awards

Research Awards

- Ray Watson Doctoral Fellowship Award, Paul Merage School of Business, UC Irvine, May 2019
- Third Best Poster Presentation Award, Annual Research Festival, Paul Merage School of Business, May 2018

Teaching Awards

• Division of Teaching Excellence and Innovation (DTEI) Fellowship Award, UC Irvine, June 2020

Scholarships and Tuition Wavers

- Five-year doctoral fellowship and graduate research and teaching assistantship, Paul Merage School of Business, UC Irvine, Sept. 2015
- Two-year TUBITAK Project (112M870) MSc Scholarship, Koç University, Istanbul, Turkey, Sept. 2013

Other Awards

- Management Fellowship Award, highest score in PhD comprehensive exam, Paul Merage School of Business, UC Irvine, Sept. 2017
- Ranked 218th amongst more than 400,000 students in the Iranian Nationwide University Entrance Exam, June 2008

Research Grants, Consultancies, and Awards

- Principal Investigator (PI), UKRI Impact Acceleration Account (IAA) Grant, jointly funded by Engineering and Physical Sciences Research Council (EPSRC), Economic and Social Research Council (ESRC), and Manchester Airports Group (MAG). AI and digital framework to improve queue time in the airport and to understand the impact on passenger satisfaction and spending behaviour airside. Amount awarded: £26,964.71, December 1, 2024 September 15, 2025.
- 2. Principal Investigator (PI), University of Manchester Consultancy Project, funded by International Maize and Wheat Improvement Center (CIMMYT), Nairobi, Kenya. A machine-trained AI tool for seed marketing for Sub-Saharan African SMEs. Amount awarded: £6,795.00, August 15, 2022 May 15, 2023.

Research Supervision

Postdoctoral Researchers

1. Hafiz Tayyab Rauf. (Main Supervisor)

Alliance Manchester Business School, University of Manchester December 2024–present Project title: AI and Digital Framework to improve queue time in the airport and to understand the impact on passenger satisfaction and spending behaviour airside Co-supervised by Richard Allmendinger

co supervised by Tuestara Timmenania

PhD Student Supervision

1. Sara Tavakoli. (Co-supervisor)

Alliance Manchester Business School, University of Manchester 2023–2027 (expected)
Project title: Energy Poverty Definition, Drives and Alleviation Strategies: from concept to policy development with a focus on the UK
Co-supervised by Pedro Sampaio

2. Ali Iltaf. (Co-supervisor)

Alliance Manchester Business School, University of Manchester 2023–2027 (expected) Project title: Machine learning and data analytics for nurturing talent and performance profiling and development in cricket

Co-supervised by Richard Allmendinger, Richard Kingston, and Stafford Murray

3. Dimitri Rusin. (Co-supervisor)

Alliance Manchester Business School, University of Manchester 2024–2028 (expected)
Project title: Co-op-Solve-M: A Co-operative Algorithm Framework for Solving Large-Scale Heterogeneous Problems with Multiple Objectives

Co-supervised by Manuel Lopez-Ibanez and Joshua Knowles

Examiner to PhD end-of-year Annual Review

- 1. **Nazanin Nami**, Coordination in reverse supply chains for pharmaceuticals by means of the evolutionary game theory. Alliance Manchester Business School, 2023.
- 2. **Amirhossein SalehiAmiri**, Patient and expert scheduling for home health care service menu using IoMT wearable devices. Alliance Manchester Business School, 2024.

Master Student Supervision (past)

1-year MSc Programmes with summer dissertation projects, Alliance Manchester Business School

- 1. Summer 2024: Supervised 6 individual Masters dissertations— MSc Business Analytics
- 2. Summer 2023: Supervised 6 individual Masters dissertations— MSc Operations, Project, and Supply Chain Management
- 3. Summer 2022: Supervised 3 individual Masters dissertations— MSc Business Analytics
- 4. **Summer 2022**: Supervised 5 individual Masters dissertations— MSc Operations, Project, and Supply Chain Management

Professional Service

Ad Hoc Reviewer, Journals

- Optimization Letters
- International Journal of Operations and Production Management (IJOPM)
- Systems Engineering
- Computational Management Science

Reviewer, Conferences and Competitions

• The Genetic and Evolutionary Computation Conference, GECCO 2022 and GECCO 2023

Conference Stream/Track Organizer

• The Operational Research Society Annual Conference (OR64), University of Warwick, Coventry, UK (2022)

Conference Session Chair

• 10th INFORMS Transportation Science and Logistics Society Workshop, Bergen, Norway, June 2022.

University Service

- President of the PhD Students Association and student representative on the PhD Committee, Paul Merage School of Business, UC Irvine (academic year 2020-'21)
- Served as Division of Teaching Excellence and Innovation (DTEI) fellow to prepare "Remote Instruction Guide" for transitioning to virtual teaching, and to assist designing new course syllabi for hybrid and online classes at Paul Merage School of Business, UC Irvine (Summer & Fall 2020)

Teaching Experience

Unit Coordinator (Postgraduate)

- Marketing Analytics (MSc elective), AMBS

(Semester 2, 2023–24 and 2024–25)

- Global Operations Management (MSc core)

(Semester 1, 2022–23 and 2023–24)

- Business Improvement Tools, Techniques and Systems (MSc elective) (Semester 2, '21-'22 and '22-'23)

Unit Coordinator (Undergraduate)

- Fundamentals of Data Analytics (UG core), AMBS

(Semester 2, 2023–24 and 2024–25)

- Operations Management and Strategy (UG elective), AMBS (Semester 1, 2021–22, 2022–23, 2023–24)

Recitation Leader/Head Teaching Assistant

– Management Science (undergrad & MBA core), UC Irvine – (Fall 2017-'18-'19, Winter '18-'19-'20, Spring '16-'17-'18-'19, Summer '17-'18)

- Statistics for Management (MBA core), UC Irvine

(Winter 2016, Summer '16)

- Predictive Analytics (MBA elective), UC Irvine

(Fall '17-'18, Spring '17-'20)

- Operations Management (MBA elective), UC Irvine

(Fall 2016)

Teaching Assistant

- Analytical Decision Making (MBA elective), UC Irvine (Winter '18-'19)

- Operational Excellence (MBA elective), UC Irvine

(Fall '20)

- Discrete Mathematical Structures (undergrad core), Koc University (Fall '13-'14)

- Introduction to Statistics (undergrad core), Koç University

(Spring '14)

- Logistics Management (undergrad & grad elective), Koc University

(Spring '15)

Teaching Workshops

- Obtained University of Manchester Humanities New Academic Programme (HNAP) and Higher Education Academy (HEA) fellowship
 December 2024
- Transition to Remote Teaching (attended 8 workshops), UC Irvine

Summer 2020

- TA Professional Training and Development Program (two-day workshop), UC Irvine

Sept. 2015

Consulting and Work Experience

Data Science Intern - BAYER Crop Science, Saint Louis, MO

Summer 2019

- Learned about seed production business, and visited multiple Monsanto campuses in multiple states.
- Learned how to work with large-scale datasets and produce visualizations through DataCamp courses.
- Designed two algorithms for large-scale optimization problems in seed processing centers.
- Developed a plan to assign planting fields of corn and soybean of different grades to various locations across the US and Canada, and presented managerial insights.