Curriculum Vitae As of August, 8, 2017

PERSONAL DATA

Full Name: Ali Husseinzadeh Kashan

Date (place) of birth: May 10, 1981 (Tehran, Iran)

Tel: +98 2182884398, Fax: +98 2182884393

URL: drkashan.ir

Primary Email: a.kashan@modares.ac.ir Secondary Email: a.kashani@aut.ac.ir

Affiliation: Assistant Professor at the Department of Industrial and Systems Engineering, Tarbiat

Modares University, P.O.Box: 14115-116, Tehran, Iran.

EDUCATION

• Post Doctoral Fellowship at Amirkabir University of Technology, Tehran, Iran, 2010-2011 (With financial support of Iran National Elite foundation).

 Ph.D in Industrial Engineering, Amirkabir University of Technology, Tehran, Iran, 2005-2009.

Dissertation title: "Upper and lower bounds for batch-processing machines scheduling problems with different capacity requirement for jobs".

HONORS AND AWARDS

- Honoree, "Outstanding Young Scientist of Industrial Engineering", The Academy of Sciences of the Islamic Republic of Iran, 2016 (The Department of Engineering Sciences of the Academy held 13th honoring ceremony of prestigious engineers and 4th honoring ceremony of prominent Iranian young scientists in engineering, on the Engineer's Day at 24th February, 2016. In this event which is held annually, at most, 3 distinguished engineering professors, 3 prestigious engineers, and 5 prominent young scientists in different engineering fields are honored).
- Recipient, "Outstanding Researcher Award", Tarbiat Modares University, 2015.
- Recipient, Iran National Elite Foundation award; "Dr. Kazemi Ashtiani Research Grant Award for Young Assistant Professors", 2012.
- Recipient, Iran National Elite Foundation award; "Honorary Travel to Mecca for Hajj Pilgrimage", 2011.
- Recipient, Iran National Elite Foundation award; "Shahid Chamran Scientific Award for Postdoc Researchers", 2010.
- Recipient, Iran National Elite Foundation "Scientific Award", 2009.
- Deserve to appreciate, Iranian "12th Book of the Season Award" for: Slack N, Lewis M (2002). Operations Strategy. Prentice-Hall. (Translated into Persian by Moattar Husseini S.M, Husseinzadeh Kashan A, Amirkabir University Press, 2009). The book was deserved to appreciate together with 38 books amongst 5887 books published during the season.



- Nominee, 12th Kharazmi young researcher award for a research project entitled "League Championship Algorithm (LCA): A novel Algorithm for Global Engineering Optimization Inspired by Sport Championships", 2010.
- Elite researcher, Department of Industrial Engineering, Amirkabir University of Technology, 2007.
- Outstanding Ph.D student, Amirkabir University of technology, 2005-2009.
- Ranked 2nd in Industrial Engineering Ph.D entrance examination, Amirkabir University of Technology, 2005.
- Outstanding M.Sc student, Amirkabir University of Technology, 2003-2005.

LIST OF PUBLICATIONS

Refereed Journal Papers (ISI Indexed)

- 1. Abbasi-Pooya A, **Husseinzadeh Kashan A** (2017). New Mathematical Models and a Hybrid Grouping Evolution Strategy Algorithm for Optimal Helicopter Routing and Crew Pickup and Delivery. *Computers & Industrial Engineering*, 112, 35-56.
- 2. Karimiyan S, Moghadam AS, **Husseinzadeh Kashan A**, Karimiyan M (2017). Evaluation of collapse distribution in 3-Story RC moment resisting asymmetric buildings due to earthquake loads. *International Journal of Civil Engineering*, 15, 809–825.
- 3. **Husseinzadeh Kashan A**, Keshmiry M, Heidary Dahooie J, Abbasi-Pooya A (2017) A simple yet effective grouping evolutionary strategy (GES) algorithm for scheduling parallel machines. *Neural Computing and Applications*. In Press.
- 4. Jalili S, **Husseinzadeh Kashan A**, Hosseinzadeh Y (2016). League championship algorithms for optimum design of pin-jointed structures. *Journal of Computing in Civil Engineering*, In Press.
- 5. **Husseinzadeh Kashan A** (2015). An Effective Algorithm for Constrained Optimization Based on Optics Inspired Optimization (OIO). *Computer Aided Design*, 63, 52-71.
- 6. **Husseinzadeh Kashan A** (2015). A New Metaheuristic for Optimization: Optics Inspired Optimization (OIO). *Computers & Operations Research*, 55, 99–125.
- 7. **Husseinzadeh Kashan A**, Akbari A, Ostadi B (2015). Grouping evolution strategies: a new efficient solution approach for grouping problems. *Applied Mathematical Modeling*, 39, 2703-2720.
- 8. Karimiyan S, Moghadam AS, **Husseinzadeh Kashan A**, Karimiyan M (2015). Progressive collapse evaluation of RC symmetric and asymmetric mid-rise and tall buildings under earthquake loads. *International Journal of Civil Engineering*, *Transaction A: Civil Engineering*, 13, 30-44.
- 9. **Husseinzadeh Kashan A**, Noktehdan A, Karimi B (2014). A novel discrete particle swarm optimization algorithm for the manufacturing cell formation problem. *International Journal of Advanced Manufacturing Technology*, 73, 1543–1556.
- 10. **Husseinzadeh Kashan A** (2014). League Championship Algorithm (LCA): An algorithm for global optimization inspired by sport championships *Applied Soft Computing*, 16, 171-200.
- 11. Karimiyan S, **Husseinzadeh Kashan A**, Karimiyan M (2014). Progressive collapse vulnerability in 6-Story RC symmetric and asymmetric buildings under earthquake loads. *Earthquakes and Structures*, 6, 473-494.

- 12. Karimiyan S, Moghadam AS, Karimiyan M, **Husseinzadeh Kashan A** (2013) Seismic collapse propagation in 6 story RC regular and irregular buildings, *Earthquakes and Structures*, 753-779.
- **13. Husseinzadeh Kashan A**, Rezaee B, Karimiyan S (2013). An efficient approach for unsupervised fuzzy clustering based on grouping evolution strategy. *Pattern Recognition*, 46, 1240-1254.
- **14.** Husseinzadeh Kashan A, Husseinzadeh Kashan M, Karimiyan S (2013). A particle swarm optimizer for grouping problems. *Information Sciences*, <u>252</u>, 81-95.
- 15. Husseinzadeh Kashan M, **Husseinzadeh Kashan A**, Nahavandi N (2013). A novel differential evolution algorithm for binary optimization. *Computational Optimization and Applications*, 55, 481-513.
- 16. **Husseinzadeh Kashan A** (2011). An efficient algorithm for constrained global optimization and application to mechanical engineering design: league championship algorithm (LCA). *Computer-Aided Design*, 43, 1769-1792.
- 17. Husseinzadeh Kashan M, Nahavandi N, **Husseinzadeh Kashan A** (2011). DisABC: A new artificial bee colony algorithm for binary optimization. *Applied Soft Computing*, 12, 342-352.
- 18. Noktehdan A, Karimi B, **Husseinzadeh Kashan A** (2010). A differential evolution algorithm for the manufacturing cell formation problem using group based operators. *Expert System with Applications*, 37, 4822-4829.
- 19. Zarei M, Mansour S, **Husseinzadeh Kashan A**, Behrooz Karimi (2010). Designing a reverse logistics network for end-of-Life vehicles recovery. *Mathematical Problems in Engineering*, Volume 2010, Article ID 649028, doi:10.1155/2010/649028.
- 20. **Husseinzadeh Kashan A**, Karimi B, Jolai F (2010). An effective hybrid multi-objective genetic algorithm for bi-criteria scheduling on a single batch processing machine with non-identical job sizes. *Engineering Applications of Artificial Intelligence*, 23, 911-922.
- 21. Rafiee Parsa N, Karimi B, **Husseinzadeh Kashan A** (2010). A branch and price algorithm to minimize makespan on a single batch processing machine with non-identical job sizes. *Computers & Operations Research*, 37, 1720-1730.
- 22. Naimi Sadigh A, Mozafari M, **Husseinzadeh Kashan A** (2010). A mixed integer linear program and tabu search approach for the complementary edge covering problem. *Advances in Engineering Software*, 41, 762-768.
- 23. **Husseinzadeh Kashan A,** Karimi B, Fatemi Ghomi S.M.T (2009). A note on: Minimizing makespan on a single batch processing machine with non-identical job sizes. *Theoretical Computer Science*, 410, 2754-2758.
- 24. **Husseinzadeh Kashan A,** Karimi B (2009) A discrete particle swarm optimization algorithm for scheduling parallel machines. *Computers & Industrial Engineering*, 56, 216-223.
- 25. **Husseinzadeh Kashan A**, Karimi B (2009). An improved mixed integer linear formulation and several lower bounds for minimizing makespan on a flowshop with batch processing machines. *International Journal of Advanced manufacturing Technology*, 40, 582-594.

- 26. **Husseinzadeh Kashan A**, Karimi B, Jenabi M (2008). A hybrid genetic heuristic for scheduling parallel batching machines with arbitrary job sizes. *Computers & Operations Research*, 35, 1084-1098.
- 27. **Husseinzadeh Kashan A**, Karimi B (2008) Scheduling a single batch-processing machine with arbitrary job sizes and incompatible job families: an ant colony framework. *Journal of the Operational Research Society*, 59, 1269-1280.
- 28. **Husseinzadeh Kashan A**, Karimi B, Jolai F (2006). Effective hybrid genetic algorithm for minimizing makespan on a single-batch-processing machine with non-identical job sizes. *International Journal of Production Research*, 44, 2337-2360.
- 29. Fazel Zarandi MH, Turksen IB, **Husseinzadeh Kashan A** (2006). Fuzzy control charts for variable and attribute quality characteristics. *Iranian Journal of Fuzzy Systems*, 3, 31-44.

Refereed Journal Papers (Non-ISI Indexed)

- 1. **Husseinzadeh Kashan A**, Rahmani A, Ostadi B (2017). Revenue Management under Variable Resource Capacity Requirements and Importance Factor for Patient Classes in Hospitals. *Journal of Modeling in Engineering*, In Press (in Persian).
- 2. Nakhjirkan S, Mokhatab Rafiei F, **Husseinzadeh Kashan A** (2017). Developing an integrated decision making model in supply chain under demand uncertainty using genetic algorithm and network data envelopment analysis. *International Journal of Mathematics in Operational Research* (In press).
- 3. Vardi Chari M, **Husseinzadeh Kashan A** (2017). Air Cargo Revenue Management under Variable Capacity Requirements with the Possibility of Overbooking. *Journal of Industrial Engineering*, In Press (in Persian).
- 4. Heirani S, **Husseinzadeh Kashan A**, Akbari AA (2017). The natural gas transmission network optimization model—Case study Iran gas transmission networks. *Petroleum Research*, In Press (in Persian).
- 5. Mostafavi SM, Albadavi A, **Husseinzadeh Kashan A** (2017). Supply chain network design of new products. *Sharif Journal of Industrial Engineering and Management*, 32, 15-25.
- 6. Kahe Z, **Husseinzadeh Kashan A** (2017). Developing a probabilistic two-Stage model for hierarchical healthcare facility location by considering the service rate (A case study of Tehran heart center). *Journal of Hospital*, 15, 4, 21-38 (in Persian).
- 7. Seyfi Sarigaye M, Chaharsooghi SK, **Husseinzadeh Kashan A** (2017). Developing a model-based DSS for integrating project performance evaluation and risk management (construction investment project). *Sharif Journal of Industrial Engineering and Management*, In Press (in Persian).
- 8. Mafakheri Z, Skeikhmohammady M, **Husseinzadeh Kashan A** (2017). Employing multiobjective simulated annealing algorithm to solve a developed model for determining the size of freight cars in rail transportation industry. *Quarterly Journal of Transportation Engineering*, In Press (in Persian).
- 9. Kaheh Z, Baradaran Kazemzadeh R, Masehian E, **Husseinzadeh Kashan A** (2017). Developing a bi-level programming model for procurement management and a hybrid algorithm for its solution. *Sharif Journal of Industrial Engineering and Management*, In Press (in Persian).

- 10. Hamid Eskandari H, Anvary Rostamy AA, **Husseinzadeh kashan A** (2016). Risk hedging via a mixture of future contract indices (Case: Iran financial market). *Financial Engineering and Securities Management (Portfolio Management)*, 7, 28, 55-72 (in Persian).
- 11. Mafakheri Z, **Husseinzadeh Kashan A**, Skeikhmohammady M (2016). The dynamic multiobjective rail-car fleet sizing problem and its solution by non-dominated sorting genetic algorithm-II. *Journal of Industrial engineering*, 50, 1, 95-107 (in Persian).
- 12. Hamid Eskandari H, Anvary Rostamy AA, **Husseinzadeh kashan A** (2016). Optimum exchange rate cross hedging ratio using gold future contracts in Iran financial market. *Financial Engineering and Securities Management (Portfolio Management)*, 6, 25, 21-40 (in Persian).
- 13. Ghodrati R, Ostadi B, **Husseinzadeh kashan A** (2014). Key success factors for organizational excellency. *Organizational Development of Police*, 50, 61-82 (in Persian).
- 14. Eslami S, Sajadi SM, **Husseinzadeh Kashan A** (2014). Selecting a preventive maintenance scheduling method using simulation and multicriteria decision making. *International Journal of Logistics Systems and Management*, Published Online.
- 15. Farzam Rad M, Sajjadi SM, **Husseinzadeh Kashan A** (2014). Determination of optimal production rate in stochastic manufacturing systems by Simulation optimization approach. *International Journal of Industrial and System Engineering*, Published Online.
- 16. **Husseinzadeh Kashan A,** Karimi B (2012). New lower bounds for the optimal makespan on a single batch processing machine. *Amirkabir Journal of Mechanical Engineering* (*Amirkabir*), 43, 2, 75-84 (in Persian).
- 17. Hosseinzadeh Malek Jahan S, Najafi S E, **Husseinzadeh Kashan A**, Bahadoran N (2013). Proposing a model for production agility measurement, using industrial automation effectiveness, with case study in Amol School Facilities Company. *International Journal of Application or Innovation in Engineering & Management*, 2, 242-250.
- 18. Aghalarzadeh O, **Huseinzadeh Kashan A**, Ashtiani B (2013). A pathology and overview of factors influencing the efficiency of ERP/SAP system in the Iranian Auto Industry. *Journal of Applied Science and Engineering Management*, 1 (3), 22-31.

Refereed Conference Papers

- 1. **Husseinzadeh Kashan A**, Abbasi-Poya A, Karimiyan S (2017). A Jacket-based Formulation and a League Championship Algorithm for Helicopter Routing in Offshore Transportation. *Second International Conference on Data Engineering and Communication Technology* (ICDECT), Pune, India.
- 2. Kahe Z, **Husseinzadeh Kashan A**, Kazemzadeh RB (2017). An Optics Inspired Optimization Algorithm for Solving a Multi-Period Economic Dispatch Problem. *Second International Conference on Data Engineering and Communication Technology* (ICDECT), Pune, India.
- 3. Asadi S, Albadavi A, **Huseinzadeh Kashan A** (2017). Market risk capital requirement for solvency assessment model. 2nd *International Conference on Management, Accounting and Economics*, Tehran, Iran (in Persian).
- 4. Husseinzadeh Kashan A, Abbasi-Pooya A, Karimiyan Sommayeh (2016). A new mathematical model and a league championship algorithm to determine the helicopter routes in offshore gas fields. 2016 IEEE International Conference on Systems, Man, and Cybernetics, SMC 2016, 2145-2150, Budapest, Hungary.

- 5. Mehdizadeh P, **Huseinzadeh Kashan A**, Mokhatab Rafiee F (2016). Price volatility of the gold coin future contract based on price volatility of other assets and stocks index. *International conference on Industrial Engineering and Management*, Tehran, Iran (in Persian).
- 6. Mehdizadeh P, **Huseinzadeh Kashan A**, Mokhatab Rafiee F (2016). Stocks portfolio prioritization and optimization using multicriteria decision making and goal programming. *International conference on Industrial Engineering and Management*, Tehran, Iran (in Persian).
- 7. **Husseinzadeh Kashan A**, Tavakkoli-Moghaddam R, Gen M (2016). A warfare inspired optimization algorithm: the Find-Fix-Finish-Exploit-Analyze (F3EA) metaheuristic algorithm. *Tenth International Conference on Management Science and Engineering Management, ICMSEM* 2016, Baku, Azerbaijan.
- 8. Soltanpoor Z, **Husseinzadeh Kashan A** (2015), Solving the bin packing problem using a combination of grouping evolutionary strategy and MTRP reduction method. *Annual Conference on Management and Business Economics*, Tehran, Iran (in Persian).
- 9. Soltanpoor Z, **Husseinzadeh Kashan A**, Akbari A (2015). A next fit heuristic method based on decreasing order of item widths to generate feasible solutions of the two dimensional bin packing problem. *Annual Conference on Management and Business Economics*, Tehran, Iran (in Persian).
- 10. Hashemi SN, **Husseinzadeh Kashan A**, Zegordi SH (2016). A branch and bound algorithm for minimizing makespan on a single batch processing machine with non-identical job sizes. 12th International Industrial Engineering Conference, Tehran, Iran (in Persian).
- 11. Ebrahimifard S, Nahavandi N, **Husseinzadeh Kashan A** (2016). Modeling a bi-objective project scheduling problem under resource constraint and time—cost trade off and its solution by non-dominated sorting genetic algorithm. 12th International Industrial Engineering Conference, Tehran, Iran (in Persian).
- 12. Badarloo S, **Husseinzadeh Kashan A** (2015). A solution method based on optics inspired optimization for the traveling salesman problem. *International Conference on Modern Research in Management and Industrial Engineering*, Tehran, Iran (in Persian).
- 13. Badarloo S, **Husseinzadeh Kashan A** (2015). Optimization of the quadratic assignment problem using optics inspired optimization algorithm. *International Conference on Modern Research in Management and Industrial Engineering*, Tehran, Iran (in Persian).
- 14. **Husseinzadeh Kashan A** (2015). A new meta-heuristic algorithm inspired from enemies detection and bombardment process in battlefields. *International Conference on Industrial and Systems Engineering (ICISE* 2015), Tehran, Iran (in Persian).
- 15. Yavari M, Chaharsooghi SK, **Husseinzadeh Kashan A** (2015). An inventory routing model in a two level supply chain with multi customers and multi vendors. *First International Conference on Industrial and Systems Engineering (ICISE* 2015), Tehran, Iran (in Persian).
- 16. Rezvani N, Zegordi SH, (2015). Flexible job shop scheduling problem with preventive maintenance tasks and work in process constraint. *First International Conference on Industrial and Systems Engineering (ICISE* 2015), Tehran, Iran.
- 17. **Husseinzadeh Kashan A**, Vosooghpoor F, Akbari A (2014). A grouping evolution strategy algorithm for location inventory routing problem with multiple objectives. 6th *National and* 4th *International Conference on Logistics & Supply Chain*, Tehran, Iran (in Persian).

- 18. Vardi Chari M, **Husseinzadeh Kashan A**, Abbasi-Pooya A, (2015). Revenue management of air cargos under variable capacity requirement for the orders. 11th International Industrial Engineering Conference, Tehran, Iran (in Persian).
- 19. Sadri F, Ashtiani B, **Husseinzadeh Kashan A** (2015). A bi-objective mathematical model for the cell formation problem considering the production variables. 11th International Industrial Engineering Conference, Tehran, Iran (in Persian).
- 20. Sajadi SM, **Husseinzadeh Kashan A**, Khaledan S (2014). A New approach for permutation flow-shop scheduling problem using league championship algorithm. *The Joint International Symposium on CIE*44 *and IMSS*'14, Istanbul, Turkey.
- 21. Ghadirnejad M, **Husseinzadeh Kashan A**, Rismanchian F (2013). A new competitive method for solving assembly line balancing problem. 1st International Conference on New Directions in Business, Management, Finance and Economics, Famagusta, Cyprus.
- 22. **Husseinzadeh Kashan A**, Karimiyan S, Karimiyan M, Husseinzadeh Kashan H (2012). A modified League Championship Algorithm for numerical function optimization via artificial modeling of the "between two halves analysis". *The 6th International Conference on Soft Computing and Intelligent Systems and The* 13th International Symposium on Advanced Intelligent Systems, 1944-1949. Kube, Jappan.
- 23. Khaledan S, Sajadi SM, **Husseinzadeh Kashan A** (2015). A solution method for the travelling salesman problem based on League championship algorithm and comparisons with a modified genetic algorithm. *First National Conference on Business management*, Hamedan, Iran (in Persian).
- 24. Khaledan S, Sajadi SM, **Husseinzadeh Kashan A** (2014). A league championship algorithm for the travelling salesman problem. 2nd *National conference on Industrial Engineering and Systems*, Tehran, Iran (in Persian).
- 25. Eslami S, Sajadi SM, **Husseinzadeh Kashan A** (2013). A multicriteria decision making model for preventive maintenance scheduling using Arena simulation software in multimachines systems. *First National Industrial Engineering and Systems Conference*, Tehran, Iran (in Persian).
- 26. Eslami S, Sajadi SM, **Husseinzadeh Kashan A** (2013). Comparing preventive maintenance scheduling methods for serial systems using simulation and multicriteria decision making. *First National Industrial Engineering and Systems Conference*, Tehran, Iran (in Persian).
- 27. Farzamrad M, Sajadi SM, **Husseinzadeh Kashan A** (2013). Multiobjective production planning using simulation based optimization. *First National Industrial Engineering and Systems Conference*, Tehran, Iran (in Persian).
- 28. Farzamrad M, Sajadi SM, **Husseinzadeh Kashan A** (2013). Probabilistic multi-period multi-product production planning mathematical and simulation models. *First National Industrial Engineering and Systems Conference*, Tehran, Iran (in Persian).
- 29. Hosseinzadeh Malek Jahan S, Najafi S E, **Husseinzadeh Kashan A**, Bahadoran N (2013). Analyzing the effect of RFID on improving supply chain agility indices based on a developed ESCM approach. *First National Industrial Engineering and Systems Conference*, Tehran, Iran (in Persian).
- 30. S. H Yakhchali, **Husseinzadeh Kashan A** (2011). On possible and necessary optimality of schedules in the single machine scheduling problem with imprecise processing times and due dates. *WCE*2011, *World Congress on Engineering*, 1-5, London, UK.

- 31. **Husseinzadeh Kashan A**, Karimi B (2010). A new algorithm for constrained optimization inspired by the sport league championships. *WCCI* 2010 *IEEE World Congress on Computational Intelligence*, 487-494, Barcelona, Spain.
- 32. Husseinzadeh Kashan M, Nahavandi N, **Husseinzadeh Kashan A** (2010). A new differential evolution algorithm for binary optimization. 3rd Iranian Operations Research Conference, Tehran, Iran (in Persian).
- 33. **Husseinzadeh Kashan A** (2009). League Championship Algorithm: a new algorithm for numerical function optimization. *SoCPaR* 2009 *IEEE International Conference of Soft Computing and Pattern Recognition*, 43-48, Kualalumpur, Malaysia.
- 34. **Husseinzadeh Kashan A**, Jenabi M, Husseinzadeh Kashan M (2009). A new solution approach for grouping problems based on evolution strategies. *SoCPaR* 2009 *IEEE International Conference of Soft Computing and Pattern Recognition*, 88-93, Kualalumpur, Malaysia.
- 35. **Husseinzadeh Kashan A**, Jenabi M, Torabi SA, Faraji E, Ghazanfari P (2008). A simulation based optimization approach for measuring and analyzing the availability of Peugeot 405 body assembly line. 5th International Conference on Preventive maintenance, Tehran, Iran (in Persian).
- 36. **Husseinzadeh Kashan A**, Karimi B, Jolai F (2006). Bi-criteria scheduling on a single batch processing machine with non-identical job sizes. *INCOM* '2006 12th FAC Symposium on *Information Control Problems in Manufacturing*, 727-732, Saint-Étienne, France.
- 37. **Husseinzadeh Kashan A**, Karimi B, Jolai F (2006). Minimizing makespan on a single batch processing machine with non-identical job sizes: a hybrid genetic approach. *EvoCOP* 2006 *Evolutionary Computation in Combinatorial Optimization: 6th European Conference*, Springer-Verlag, Lecture Notes in Computer Science, 135-146, Budapest, Hungary.

Books and Chapters

- 1. **Husseinzadeh Kashan A**, Tavakkoli-Moghaddam R, Gen M (2016). A warfare inspired optimization algorithm: the Find-Fix-Finish-Exploit-Analyze (F3EA) metaheuristic algorithm. In Jiuping Xu J, Hajiyev A, Nickel S, Gen M, Eds. Proceedings of the Tenth International Conference on Management Science and Engineering Management, Series Advances in Intelligent Systems and Computing, 393-408 (Chapter).
- 2. **Husseinzadeh Kashan** (2017). Supply chain planning (electronic document). Department of Industrial and Systems Engineering, Tarbiat Modares University (in Persian).
- 3. **Husseinzadeh Kashan** (2015). Linear Programming (electronic document). Department of Industrial and Systems Engineering, Tarbiat Modares University (in Persian).
- 4. Muattar Husseini SM, **Husseinzadeh Kashan A** (2009). Operations Strategy. Amirkabir University of Technology Press (A Persian translation of Slack N, Lewis M (2011). Operations Strategy, Financial Times: Prentice Hall.)
 - * The book has been deserve to appreciate in Iranian 12th Book of the Season Award together with 38 books amongst 5887 books published during the season.
- 5. Karimi B, **Husseinzadeh Kashan A**, Jenabi M (2007). Theory and practice of heuristic and meta-heuristic search methods (electronic document). Department of Industrial Engineering and Management Systems, Amirkabir University of Technology (in Persian).

6. **Husseinzadeh Kashan A**, Karimi B, Jolai F (2006). Minimizing makespan on a single batch processing machine with non-identical job sizes: a hybrid genetic approach. In Gottlieb J, Raidl GR, Eds. Evolutionary Computation in Combinatorial Optimization, Series Lecture Notes in Computer Science, 135-146 (Chapter).

RESEARCH INTERESTS

- Mathematical modeling and algorithmic approaches in the context of:
 - Logistics and supply networks
 - Revenue management and pricing
 - Production and project scheduling
 - Facility location
 - Grouping problems (e.g. bin packing problem, line balancing problem, vehicle routing problem, etc)
- Computational intelligence and engineering design with nature inspired optimization
- Combinatorial optimization and approximation algorithms
- Probabilistic models and simulation based optimization.

REVIEW SERVICES TO SCIENTIFIC JOURNALS

- Applied Soft Computing
- IEEE Transactions on Evolutionary Computations
- Omega, the International Journal of Management Science
- Ecological Informatics
- Computers & Operations Research
- Journal of the Operational Research Society
- Computers & Industrial Engineering
- International Journal of Production Research
- International Journal of Production Economics
- Information Sciences
- Engineering optimization
- Computer Aided Design
- International Journal of Industrial Engineering & Production Research
- International Journal of Computer Integrated Manufacturing
- Annuals of Operations research
- Soft Computing
- Journal of AI and Data mining
- Scientia Iranica
- Journal of Quality Engineering and Production Optimization
- Supply Chain Management Quarterly

- Journal of Hospital
- Sharif Journal of Industrial Engineering and Management

RESEARCH/INDUSTRIAL/ORGANIZATIONAL PROJECTS

- 1. **Husseinzadeh Kashan A** (2017). Optimization of the foreword-backward part-pallet distribution network in the supply chain of Sazeh-Gostar-Saipa Company. Employer: Sazeh-Gostar-Saipa Company.
- 2. **Husseinzadeh Kashan A** (2017). Developing the milk-run logistic network optimizer software. Employer: Sazeh-Gostar-Saipa Company.
- 3. **Husseinzadeh Kashan A** (2017). Identification, classification and market study of the target markets for exporting date palm and codification of entrance strategies into export markets. Employer: Bushehr Industrial Estates Company.
- 4. **Husseinzadeh Kashan A** (2017). Designing a comparative system to evaluate the effectiveness of technical, credit and renovation aids dedicated to SMEs. Employer: Semnan Industrial Estates Company.
- 5. **Husseinzadeh Kashan A**, Akbari A (2015). Offshore supply vessel fleet sizing and positioning. Employer: Pars Oil and Gas Company.
- 6. **Husseinzadeh Kashan A**, Akbari A (2015). Helicopter daily route planning. Employer: Pars Oil and Gas Company.
- 7. **Husseinzadeh Kashan A** (2015). F3EA metaheuristic algorithm: an optimization algorithm inspired from the Find-Fix-Finish-Exploit-Analyze targeting process of contemporary warfare. Tarbiat Modares University.
- 8. **Husseinzadeh Kashan A** (2012). Optics inspired optimization (OIO): an optimization algorithm inspired from Optics. Tarbiat Modares University.
- 9. **Husseinzadeh Kashan A** (2012). Introducing a new fast converging method for complex numerical optimization problems based on league championship algorithm. With financial support of Iran National Elite Foundation. Dr. Kazemi Ashtiani Research Grant Award for Young Assistant Professors.
- 10. **Husseinzadeh Kashan A** (2010). Introducing a new method for multi-objective engineering optimization. With financial support of Iran National Elite Foundation. Shahid Chamran Scientific Award for Postdoc Researchers.
- 11. **Husseinzadeh Kashan A**, Akbari A (2015). A new effective method for solving the class of assignment problems and applications to the bin packing problem. With financial support of Azad University, South Branch of Tehran.
- 12. **Husseinzadeh Kashan A** (2010). A new method for unsupervised data clustering and its application to the knowledge management. With financial support of Armed Forces Elite Foundation.
- 13. Karimi B, **Husseinzadeh Kashan A**, Rafiee Parsa N (2009). Mathematical models and solution methods for operations scheduling in semiconductor manufacturing. With financial support of Iran National Science Foundation.
- 14. **Husseinzadeh Kashan A** (2009). League championship algorithm (LCA): an optimization algorithm inspired from sport championships. Amirkabir University of Technology.

- 15. Karimi B, **Husseinzadeh Kashan A**, Jenabi M (2009). Balancing the subassembly line in the motor assembly saloon for production of 56 TU5 motor units per hour. Employer: Iran Khodro Company (IKCO)
- 16. Karimi B, **Husseinzadeh Kashan A**, Jenabi M (2008). Simulation of the material flow and logistic activities for the Tondar 90 car product. Employer: Iran Khodro Company (IKCO).
- 17. Torabi SA, **Husseinzadeh Kashan A**, Jenabi M (2008). A model for optimal resource assignment to achieve the target level set for the availability of Peugeot 405 body assembly line via target setting on the availability of each equipment. Employer: Iran Khodro Company (IKCO).
- 18. Torabi SA, **Husseinzadeh Kashan A**, Jenabi M (2007). Designing a model for measuring and analyzing the availability of Peugeot 405 body assembly line equipment. Employer: Iran Khodro Company (IKCO).
- 19. Karimi B, **Husseinzadeh Kashan A**, Jenabi M (2007). Time study and balancing the Peugeot 206 body assembly line. Employer: Iran Khodro Company (IKCO)
- 20. Member of the project entitled "Identification and documentation of the business processes in the Ministry of Cooperatives, Labor and Social Welfare", 2015.
- 21. Member of the project entitled "Strategic planning and codification at Tarbiat Modares university", 2016.
- 22. Member of the project entitled "Planning and implementing productivity measurement system in the electricity Industry of Iran", 2008-2010. Institute of Research in Management and Planning of Energy, University of Tehran.
- 23. Member of the project entitled "Designing a comprehensive human resource system for the Pasargad Oil Company", 2010.
- 24. Member of the project entitled "Designing a human resource cooperation system for the Pasargad Oil Company", 2010.
- 25. Member of the project entitled "Designing a human resource performance assessment system for the Pasargad Oil Company", 2010.

THESIS SUPERVISED

- 1. Rezvanian S (2017). Mathematical modeling of a vehicle routing problem with the possibility of serving on site demand. Department of Industrial and Systems Engineering, Tarbiat Modares University.
- 2. Khodaie S (2017). Reliability analysis of mechanical component using simulation and optimization with respect to warranty issue. Department of Industrial and Systems Engineering, Tarbiat Modares University.
- 3. Safaiee E (2017). Planning maritime search and rescue (SAR) operations fleet under possible cooperation of rescue centers. Department of Industrial and Systems Engineering, Tarbiat Modares University.
- 4. Alizadeh N (2017). Scheduling batch processing machines using league championship algorithm and optics inspired optimization. Department of Industrial and Systems Engineering, Tarbiat Modares University.
- 5. Alimoradi M (2017). Extracting stock trading rules from market trends using League Championship Algorithm. Department of Industrial and Systems Engineering, Tarbiat Modares University.
- 6. Rasekhipoor M (2017). Joint optimization of preventive maintenance and inventory decisions for a drilling rig equipment. Department of Industrial and Systems Engineering, Tarbiat Modares University.
- 7. Aghdaie E (2017). A decision support system for integration of buffer allocation and risk management decisions under uncertainty. Department of Industrial and Systems Engineering, Tarbiat Modares University.
- 8. Sharanloo H (2017). Optimal selling price and refund determination in a two echelon supply chain under uncertain fuzzy environment. Faculty of Industrial Engineering, Azad University, South Branch of Tehran.
- 9. Mehdizadeh P (2016). Portfolio optimization with respect to coherent risk factors. Department of Industrial and Systems Engineering, Tarbiat Modares University.
- 10. Heirani S (2016). A mathematical model for the production planning of natural gas and its transmission networks design-Case study: south gas regions of Iran. Faculty of Industrial Engineering, Azad University, South Branch of Tehran.
- 11. Bakhshi M (2016). Optimal pricing, warranty and quality level decisions in a competing dual-channel supply chain. Faculty of Industrial Engineering, Azad University, South Branch of Tehran.
- 12. Kheirabadi A (2016). Optimizing advertising, warranty period and quality level decisions in a two-level supply chain. Faculty of Industrial Engineering, Azad University, South Branch of Tehran.
- 13. Tayefeh E (2015). Simulation and optimization of crew transportation to offshore gas jackets by league championship algorithm. Group of Industrial Engineering, Azad University, Science and Research Branch.
- 14. Inanloo MH (2016). Robust open-pit mining scheduling under ore grade uncertainty. Department of Industrial and Systems Engineering, Tarbiat Modares University.
- 15. Hashemi SN (2016). Scheduling a single batch processing machine with non-identical Job sizes. Department of Industrial and Systems Engineering, Tarbiat Modares University.

- 16. Rahmani A (2015). Optimizing the utilization of hospital resources based on revenue management. Department of Industrial and Systems Engineering, Tarbiat Modares University.
- 17. Abbasi-Pooya (2015). Helicopter routing and scheduling for crew transportation to offshore gas jackets. Department of Industrial and Systems Engineering, Tarbiat Modares University.
- 18. Abbasnezhad Bandari (2015). A non-financial performance assessment model for executive agencies and public institutions regulatory from suprim audit court perspective. Group of Industrial Engineering, Azad University, Qeshm International Branch.
- 19. Yeganedoost M(2015). A model to evaluate outsourced projects in water and waste water company in Hormozgan province. Group of Industrial Engineering, Azad University, Qeshm International Branch.
- 20. Moghadasi M (2015). Image Processing using league championship algorithm and optics inspired optimization. Group of Industrial Engineering, Azad University, Science and Research Branch.
- 21. Soltanpoor Z (2015). A grouping evolution strategy algorithm for the two-dimensional bin packing problem. Faculty of Industrial Engineering, Azad University, South Branch of Tehran.
- 22. Vardi Chari M (2014). Revenue management under variable capacity allocation to customers. Department of Industrial and Systems Engineering, Tarbiat Modares University.
- 23. Eyvazi M (2014). The portfolio optimization problem with multi-period investment readjustment. Department of Industrial and Systems Engineering, Tarbiat Modares University.
- 24. Badarloo S (2014). A new method based on optics inspired optimization for permutation based combinatorial optimization problems. Group of Industrial Engineering, Azad University, Science and Research Branch.
- 25. Badarloo S (2014). A new method based on league championship algorithm for permutation based combinatorial optimization problems. Group of Industrial Engineering, Azad University, Science and Research Branch.
- 26. Vosooghpoor F (2013). A new metaheuristic algorithm for multi-objective optimization of location inventory routing problem in a distribution network. Faculty of Industrial Engineering, Azad University, South Branch of Tehran.
- 27. Edraki S (2013). A new method based on league championship algorithm for mechanical engineering design optimization problems. Group of Industrial Engineering, Azad University, Science and Research Branch.
- 28. Hosseinzadeh N (2013). A new method for solving pickup and delivery problems with time window. Group of Industrial Engineering, Azad University, Science and Research Branch.
- 29. Sadri M (2013). A new metaheuristic algorithms for scheduling reliability centered maintenance activities—the case of Isfahan Mobarakeh Steel Complex Oxygen Plant. Group of Industrial Engineering, Azad University, Najaf Abad Branch.
- 30. Iraji F (2013). Reliability measurement of mechanical parts via determining the probability of material strength under single load stress condition (Case study: leaf spring for suspension system of IVECO truck). Group of Industrial Engineering, Azad University, Saveh Science and research Branch.

- 31. Aghalarzadeh O (2012). On the pathology and effectiveness of the enterprise resource planning implementation in auto industries (Case study: Iran Khodro Company). Group of Industrial Engineering, Azad University, Science and Research Branch.
- 32. Keshmiri MS (2012). An effective algorithm for solving the single and multi-objective parallel machine scheduling problem. Group of Industrial Engineering, Azad University, Science and Research Branch.
- 33. Tavasoli H (2012). A new method for reliability optimization based on league championship algorithm (LCA). Group of Industrial Engineering, Azad University, Najaf Abad Branch.

COURSES TAUGHT

- Integer Programming
- Logistics and Supply Chain Management
- Nonlinear Programming
- Stochastic Processes for Financial Engineers
- Revenue Management and Pricing
- Mathematical Programming
- Theory and Applications of Heuristic and Metaheuristic Algorithms
- Computerized Simulation
- Queuing Theory
- General Mathematics
- Probability Theory
- Linear Programming
- Production Planning and Control
- Inventory Planning and Control
- English fir IE students
- Short Course on MATLAB for IE Students

WORK EXPERIENCES

- Assistant professor at the Department of Industrial and Systems Engineering, Tarbiat Modares University (From 2012 up to now).
- Assistant professor at the Group of Industrial Engineering, Azad University, Science and Research Branch (From 2010 to 2012).
- CEO lead consulter, Iran Tobacco Company (From 2013 to 2014).
- Consulter, Order Planning and Logistic Division. Sazeh Gostar Saipa Company (From 2016 up to now).
- Consulter, Iran Khodro Machine Tool company (2017).
- Scientific Collaborator, Qom University (From 2010 to 2011).
- Chief of Systems and Organizational Excellency Division, Pasargad Oil Company (From 2011 to 2012).
- Chief of Training Division, Pasargad Oil Company (From 2011 to 2012).

APPOINTMENTS IN ACADEMIC/DOMESTIC/UNIVERSITY EVENTS

- General Chair of the 2nd International Conference on Data Engineering and Communication Technology (ICDECT) Symbiosis Institute of Technology Symbiosis International University Pune, INDIA, December 15 & 16, 2017.
- Member of the supervision board, Department of Industrial and Systems Engineering, Tarbiat Modares University (Since 2017).
- Program Committee Member of 12th International Conference on Industrial Engineering (ICEC 2015), Tehran, Iran.
- Scientific Committee Member of 12th International Conference on Industrial Engineering (ICEC 2015), Tehran, Iran.
- Reviewer member of 12th International Conference on Industrial Engineering (IIEC 2015), Tehran, Iran.
- Reviewer member of First International Conference on Industrial and Systems Engineering (ICISE 2015).
- Member of the Expertise Group of Industrial Engineering and Technology management, Young Khwarizmi Award (from 2010 to 2013).