

Curriculum Vitae

Somaye Ghandi, PhD

Assistant Professor of Industrial Engineering, Faculty of Engineering,
University of Kashan, Kashan, Ravand Blvd, Iran.

E-mail: s.ghandi@kashanu.ac.ir
gandibidgoli16@yahoo.com



Fields of Specialization and Research Interests

- Artificial Intelligence and Expert Systems
- Combinatorial Optimization and Meta-heuristics
- Robotics and Robot Motion Planning
- Industrial Automation, Computer Aided Design and Manufacturing
- Operations Sequencing and Scheduling
- Operations Research

Education

Tarbiat Modares University (TMU)

Sep. 2011 – Sep. 2015

Ph.D. in Industrial Engineering

Dissertation title: Assembly Planning of Rigid and Flexible Parts.

Overall GPA: 3.84 / 4 (Top student of the Industrial Engineering Department, class of 2015)

University of Tehran (UT)

Sep. 2005 – Oct. 2007

M.S. in Industrial Engineering

Thesis title: Solving the Parallel Machine Weighted Earliness and Tardiness Problem with a Multi-objective Scatter Search algorithm.

Overall GPA: 3.66 / 4

Isfahan University of Technology (IUT)

Sep. 2001 – Sep. 2005

B.Sc. in Industrial Engineering (minor: Industrial Technology)

Senior Project title: Design and simulation of the construction of Cake and Cookie Company.

Overall GPA: 3.32 / 4

Achievements and Honors

- Ranked 1st among the Ph.D. graduates of the Industrial Engineering Department, Tarbiat Modares University, 2015.
- Ranked 3rd among the all applicants at the Iranian Ph.D. University Entrance Exam (Concourse), September 2011.

Journal Papers

- **Ghandi, S.**, and Masehian, E., “Assembly Sequence Planning of Rigid and Flexible Parts”, *Journal of Manufacturing Systems*, Vol. 36, July 2015, pp. 128–146. DOI: 10.1016/j.jmsy.2015.05.002
- **Ghandi, S.**, and Masehian, E., “Review and Taxonomies of Assembly and Disassembly Path Planning Problems and Approaches”, *Computer Aided Design*, Vols. 67–68, October 2015, pp. 58–86. DOI: 10.1016/j.cad.2015.05.001.
- **Ghandi S.** and Masehian E., “A Breakout Local Search (BLS) Method for Solving the Assembly Sequence Planning Problem”, *Engineering Applications of Artificial Intelligence*, Vol. 39, 2015, pp. 245–266, DOI: 10.1016/j.engappai.2014.12.009.
- Tavakkoli-Moghaddam R., Jolai F. and **Ghandi S.**, Solving the Parallel Machine Weighted Earliness and Tardiness Problem with a Multi-objective Scatter Search algorithm (in Persian), *The Technical Department of the University of Tehran Journal*, Vol. 42 (7), February 2009, pp. 923-934.

Conference Papers

- Mahdieh M., **Ghandi S.** and Ojaghloo M., “A memetic algorithm for the resource-constrained project scheduling problem”, in *Proceedings of the 5th International Project Management Conference*, August. 2009, Tehran, Iran.
- Ojaghloo M. and **Ghandi S.**, “A memetic algorithm for the resource-constrained project scheduling problem” (in Persian), in *Proceedings of the 5th International Project Management Conference*, August. 2009, Tehran, Iran.

Academic Skills

- Mathematical modeling of various real-world problems and solving them through systematic and algorithmic approaches.
- Computer programming of complex algorithms for problem solving and analysis.
- Analyzing, interpreting, and reporting data and information.
- Assigning, organizing and managing working teams.

- Written and oral academic and technical presentation skills.
- Designing and developing academic curricula, syllabi, and course plans.
- Teaching engineering and mathematical concepts to undergraduate and graduate students.
- Conducting academic research in the fields of industrial, manufacturing, and robotics engineering.
- Supervising, advising, guiding, and motivating students in their research projects and theses.
- Technical reviewing of journal and conference papers, books, proposals, theses, reports, presentations, etc.