

Mostafa Mohammadi

Nationality: Iranian



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EDUCATION AND TRAINING

Ph.D in Infrastructures and Transportation engineering

Sapienza University of Rome [01/11/2021 – Current]

Address: Rome (Italy)

Website: https://phd.uniroma1.it/web/MOSTAFA-MOHAMMADI_nP1755962_.aspx

Thesis: A Solution Framework For Demand Responsive Transit With Stochastic Passenger Request and estimation of speed profile in each zone under supervision of professor Gaetano Fusco and professor Chiara Colombaroni

Master's Degree in Transportation System Engineering

Sapienza University of Rome [10/09/2019 – 29/07/2021]

Address: Rome (Italy)

Final grade: 110 Con Lode

Thesis: A set of heuristic for solving Vehicle Routing Problem in IoT-based Waste Management System under supervision of professor Gaetano Fusco and professor Chiara Colombaroni

- occupational techniques (making of standard breads, fancy breads, cakes and pastries)
- science applied to food and equipment (microbiology, biochemistry, hygiene)
- occupational technology (basic principles, hygiene and safety)
- knowledge of business and its economic, legal and social context

Master's Degree in Industrial Engineering

Mazandaran University of Science and Technology [01/09/2012 – 30/08/2014]

Address: Babol (Iran)

Final grade: GPA: 16.16 out of 20.

Thesis: Minimizing Makespan for the multiple travel salesman problem

Bachelor's Degree in Industrial Engineering

Shomal University [01/09/2008 – 31/08/2012]

Address: Amol (Iran)

Final grade: GPA: 3.75 out of 4.0

- I achieved the 3rd highest GPA among all students in Industrial Engineering (from the same entrance)

WORK EXPERIENCE

University teaching assistant in Traffic System Engineering and ITS

Sapienza University of Rome [01/11/2022 – Current]

City: Rome

Country: Italy

- Assist the professor in preparing and delivering lectures on traffic system engineering principles, traffic flow theory, macroscopic and microscopic traffic models, and ITS technologies.
- Grade assignments, lab reports, and exams, providing constructive feedback to students and assisting in their understanding of course material.
- Collaborate with the professor in developing course materials, including lecture slides, lab exercises, and assignments.

University teaching assistant in Programming for Transportation Engineering

Sapienza University of Rome [01/11/2021 – Current]

City: Rome

Country: Italy

- Assist professor in delivering lectures, conducting tutorials, and grading assignments for programming courses in transportation engineering.

- Provide guidance to students in understanding programming concepts, troubleshooting coding issues, and debugging programs.
- Support the development of course materials, stay updated with programming advancements, and hold office hours for student assistance.

Research Assistant at Smart and Sustainable Logistics Laboratory

University of Tecnológico de Monterrey [01/01/2021 – Current]

City: Monterrey

Country: Mexico

- Assist in planning, designing, and conducting research experiments and studies related to smart and sustainable logistics.
- Collect and analyze data, using statistical analysis software and tools, to derive meaningful insights and contribute to research findings.
- Collaborate with the research team in developing research proposals, literature reviews, and technical reports.

Internship in developing Multi-Objective Optimization Software

University of Jyväskylä, Finland [01/03/2021 – 30/06/2021]

City: Jyväskylä

Country: Finland

- Implementing of indicator-based evolutionary algorithm (IBEA), Preference-Based Evolutionary Algorithm (PBEA) and distance-based problems.

Supply chain planning Supervisor

Aras Taban Company [01/06/2017 – 30/08/2019]

City: Amol

Country: Iran

- Supervise and coordinate all activities related to supply chain management, including procurement, inventory control, demand forecasting, and logistics.
- Collaborate with internal stakeholders, such as production managers and sales teams, to ensure the availability of materials and products to meet customer demands.

Production and operations control Supervisor

Beryan Goosht - Food manufacturing company [01/05/2013 – 30/05/2017]

- Supervise and coordinate production activities, including scheduling, resource allocation, and workflow management, to ensure timely and efficient production processes.
- Develop and implement production plans and schedules, taking into account customer demand, capacity constraints, and resource availability.

PUBLICATIONS

Heuristic approaches to address vehicle routing problem in the lot-based waste management system

Rahmanifar, G., Mohammadi, M., Sherafat, A., Hajiaghaei-Keshteli, M., Fusco, G., & Colombaroni, C. (2023). Heuristic approaches to address vehicle routing problem in the lot-based waste management system. *Expert Systems with Applications*, 220, 119708. CiteScore = 12.2 and Impact Factor=8.665 Q1

An allocation-routing optimization model for integrated solid waste management

[2023]

Hashemi-Amiri, O., Mohammadi, M., Rahmanifar, G., Hajiaghaei-Keshteli, M., Fusco, G., & Colombaroni, C. (2023). An allocation-routing optimization model for integrated solid waste management. *Expert Systems with Applications*, 227, 120364. CiteScore = 12.2 and Impact Factor=8.665 Q1

Makespan minimizing on multiple travel salesman problem with a learning effect of visiting time.

Colombaroni, C., Mohammadi, M., & Rahmanifar, G. (2020). Makespan minimizing on multiple travel salesman problem with a learning effect of visiting time. *WSEAS Transactions on Systems and Control*, 15, 508–526. *WSEAS Transactions on Systems and Control Journal*

Submitted and Under Revision Papers

- A Dynamic Approach For Multi-Compartment Vehicle Routing Problem In Waste Management
- A Two-Echelon Vehicle Routing Problem Considering Temporal Capacity For Synchronization In Waste Collection System

- An Integrated Location And Routing Formulation For Cold Chain Logistics Network With Heterogeneous Customer Demand
- A Three-Step Waste Management System By Designing A Sustainable Supply Chain And Dynamic Routing
- Proposing A Locating-Routing Optimization Model For Two Echelon Electric Vehicle Routing Problem
- A Meta Heuristic Approach For Multi-Period Dynamic Electric Vehicle Production Routing Problem
- Designing A Multi-Period Dynamic Electric Vehicle Production-Routing Problem In A Supply Chain Considering Energy Consumption

CONFERENCES AND SEMINARS

Learn Python by Doing the Complete Python Course , Udemy July 2022.

Machine Learning, Data Science and Deep Learning with Python, Udemy.

Non-Linear Multi objective Optimization-20 hours-Jyvasyla University of Finland, March 2021.

Geographic information systems (GIS) with QGIS, Udemy course.

Mathematical Optimization with GAMS and Pyomo (Python).

How to Write a Successful Research Paper in Tecnológico de Monterrey university.

Sustainable smart logistics: Application of metaheuristic algorithms in Tecnológico de Monterrey university.

HONOURS AND AWARDS

The highest GPA (Top 1%) in transportation engineering at Sapienza University of Rome.

Ranked 1st in Erasmus competition in faculty of civil and industrial engineering of Sapienza University, Dec 2020.

LANGUAGE SKILLS

Mother tongue(s): **Persian**

Other language(s):

English

LISTENING B2 **READING** B2 **WRITING** B2

SPOKEN PRODUCTION B2 **SPOKEN INTERACTION** B2

DIGITAL SKILLS

Programming Languages

Python / Matlab / Pyomo / GAMS

Scientific Software

QGIS / TransCAD / Minitab / SPSS