Ghezelsoflu Ali

Contact Information

Via Ospedale 72
Department of Mathematics and Information
Sardegna, Cagliari, Italy

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Research Interests

Transportation and Logistics Management, VRP, Exact and Heuristic approaches for IP Models, Decomposition methods for IP Models (Cutting-plane, Column generation, Lagrangean relaxation), Network Optimizations, Linear and Non Linear Programming, Mixed Integer Programming, Stochastic Programming, Robust Optimization

Education

University of Cagliari, Cagliari, Italy

Ph.D., Operations Research, *Defended on:* 6th March 2018

- Thesis Topic: *Models and algorithms for single and multi-period drayage problems with heterogeneous vehicles*
- Advisors: Zuddas Paola, Ph.D and Frangioni Antonio, Ph.D

K.N.Toosi University of Technology, Tehran, Iran

M.S., Operations Research, jan 2012

- Topic: *Conic and Semidefinite Programing for Robust Wireless Networks*
- Advisor: Peyghami M. Reza, Ph.D
- *Summa Cum Laude*

B.S., Applied Mathematics, Sep 2009

- *Magna Cum Laude*

Research Experience

Academic Internship Jun 2017 for 4 months
UniPi
University of Pisa
Supervisor: Antonio Frangioni, Ph.D
Title: A Price and Branch algorithm for periodic VRP with heterogeneous trucks

Doctoral Research Assistant Oct 2014 to present
Operations Research,
University of Cagliari
Supervisor: Zuddas Paola, Ph.D
Title: Models and algorithms for single and multi-period drayage problems with heterogeneous vehicles

Research Assistant Jan 2013 to Oct 2014
Operations Research,
Polimi
Supervisors: Amaldi Edoardo, Ph.D

Research Assistant May 2012 to Nov 2012
Operations Research,
K.N.Toosi University of Technology
Supervisors: Peyghami M. Reza, Ph.D
Title: Conic and Semidefinite Programming for Robust Wireless Networks

Accepted Journal Publications

1. **Ghezelsoflu. A**, Di Francesco. M, Frangioni. A, Zuddas. P. "A Set-Covering formulation for a drayage problem with single and double container loads" 2017. Published on *Journal of Industrial Engineering International*.

2. **Ghezelsoflu. A**, Di Francesco. M, Frangioni. A, Zuddas. P. "A Price-and-Branch algorithm for a drayage problem with heterogeneous trucks' 2018. Published on *Electronic Notes in Discrete Mathematics (ENDM).*'

Submitted Journal Publications

1. **Ghezelsoflu. A**, Di Francesco. M, Frangioni. A, Zuddas. P. "A Price and Branch algorithm for periodic VRP with heterogeneous trucks based on min-flow formulation."

Awards

Travel Awards

- **MINO/COST** Workshop on Mixed Integer Nonlinear Programming and Applications, Paris, France April 2016
- TD1207 **COST** Short-Term Scientific Mission in University of Pisa April 2016
- **MINO/COST** Workshop on Advanced Optimization Methods, Rome, Italy Jun 2016
- **MINO/COST** Workshop on Mixed Integer Nonlinear Programming and Applications, Tilburg, the Netherlands March 2015

Student Awards — University of Cagliari, Operations Research

- Outstanding Research Award 2014-2016
- Combinatorial Optimization at Work certificate, **Zuse Institute** Berlin, Germany Sep 2015
- Doctoral Fellowship Award Sep 2014

Student Awards — K.N.Toosi University of Technology, Operations Research

- Outstanding student Award Feb 2012
- Outstanding student Award Sep 2009

Presentations

Conferences

- **ODS 2017** , A Price and Branch algorithm for PVRP with heterogeneous trucks, Sorrento, Italy. Sep 2017
- **IFORS 2017**, Set-Covering formulations for the routing of heterogeneous trucks with multiple container loads, Quebec, Canada. Jul 2017
- **AIRO 2016** , A Set-Covering formulation for a drayage problem with single and double container loads, Trieste, Italy Sep 2016
- **VeRolog 2016**, An exact method for the vehicle routing problem with backhauls and splits, Nantes, France. Jun 2016
- **AIRO 2015**, Set-Covering formulation for routing of heterogeneous trucks with container loads, Pisa, Italy Sep 2015
- **AIRO 2012**, New Robust Stability Analysis of Average Model of STATCOM using an Approach based on Semidefinite Programming, Salerno, Italy Sep 2012
- **OPTIMA 2011**, Robust Stability Analysis of Average Model of STATCOM using an Approach based on Semidefinite Programming, Petrovac, Montenegro Sep 2011

Future Talks

- **EURO/ALIO 2018**, A Price and Branch algorithm for a drayage problem with heterogeneous trucks, Bologna, Italy June 2018
- **Odysseus 2018**, A Price and Branch algorithm for periodic VRP with heterogeneous trucks based on min-flow formulation, Cagliari, Italy June 2018

Teaching Experience

Co-instructor Fall 2016
Topics in Mixed Integer Programming
with Zuddas Paola
Mathematics and Informations,
University of Cagliari

Teaching Assistant — Springs 2010–12
Operations Research
Instructor: Peyghami M.Reza, Ph.D
Applied Mathematics,
K.N.Toosi University of Technology, Operations Research

Skills

- C++, Python, SCIP, CPLEX, AMPL, MATLAB, GAMS
- Native Farsi, Native Azari, Advanced English, B2 Italian

References

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University of Cagliari

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University of Pisa

Di Francesco Massimo
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