

## Ghezelsoufi Ali

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### CONTACT INFORMATION

### 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, *Expected: Fall 2017*

- Thesis Topic: *Exact methods on single and multi-period Vehicle Routing Problem with single and double container loads*
- 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 Programming 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

**Doctoral Research Assistant**

Oct 2014 to present

Operations Research,

University of Cagliari

Supervisor: Zuddas Paola, Ph.D

**Research Assistant**

jan 2013 to Oct 2014

Operations Research,

Politecnico di Milano

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

### SUBMITTED JOURNAL PUBLICATIONS

1. **Ghezelsoufi. A, Di Francesco. M, Frangioni. A, Zuddas. P.** "A Set-Covering formulation for a drayage problem with single and double container loads" 2016. Submitted to *Journal of Industrial Engineering International*.

### PAPERS IN PREPARATION

1. **Ghezelsoufi. A, Di Francesco. M, Frangioni. A, Zuddas. P.** "An exact method for multi-period VRP set-covering formulation with heterogeneous trucks."
2. **Ghezelsoufi. A, Di Francesco. M, Frangioni. A, Zuddas. P.** "A column generation 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

- **Odysseus 2018**, A column generation 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**

Zuddas Paola

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Department of Mathematics and Informations  
University of Cagliari

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Frangioni Antonio  
Professor  
Department of Informations  
University of Pisa

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Peyghami M. Reza  
Professor  
Department of Mathematics  
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