

Curriculum Vitae

George Kozanidis

WORK ADDRESS

UNIVERSITY OF THESSALY
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EDUCATION

PhD (2002) in Industrial Engineering, Northeastern University, Boston, MA, USA
MSc (2002) in Operations Research, Northeastern University, Boston, MA, USA
MSc (1998) in Manufacturing Engineering, Boston University, Boston, MA, USA
Dipl. (1997) in Mechanical & Industrial Engineering, University of Thessaly, Volos, Greece

THESES / DISSERTATIONS

PhD Dissertation “Optimal allocation of resources among disjoint sets of discrete and continuous activities”. Supervisors: Prof. E. Melachrinoudis and Prof. M. Solomon.
MSc Project “A procedure for obtaining lower bounds in the performance of multiclass queueing networks”. Supervisor: Prof. I. Paschalidis.
Diploma Thesis “Effects of pooling on the optimization of a two demand location inventory system” (in greek). Supervisor: Prof. G. Tagaras.

RESEARCH INTERESTS

Operations Research:

- Integer Programming
- Design and Analysis of Optimization Algorithms
- Multiple Criteria Optimization
- Stochastic Modeling of Manufacturing and Transportation Systems

PROFESSIONAL EXPERIENCE

Lecturer, University of Thessaly	04/2007 – present
Adjunct Professor and Postdoctoral Researcher, University of Thessaly	05/2004 – 04/2007
Telecommunications Engineer, Istos Ltd	09/2002 - 01/2003
Instructor, Northeastern University, USA	01/2002 - 09/2002
Teaching Associate, Northeastern University, USA	09/1998 - 12/2001
Research Associate, Boston University, USA	09/1997 - 07/1998

FOREIGN LANGUAGES

English (Fluent)
German (Zertifikat)

AWARDS

Postdoctoral Research Grant, National Scholarship Foundation of Greece (2005-2007)

“Outstanding Teaching Award”, College of Engineering of Northeastern University (2002)

Financial Award for Excellent Academic Performance, National Scholarship Foundation of Greece (1996-1997)

Financial Award for Excellent Academic Performance, Technical Chamber of Greece (1996)

ARTICLES PUBLISHED IN INTERNATIONAL REFEREED SCIENTIFIC JOURNALS

A8. G. Kozanidis, G. Liberopoulos and C. Pitsilkas (2010). “Flight and maintenance planning of military aircraft for maximum fleet availability”. *Military Operations Research*, accepted.

A7. G. Liberopoulos, G. Kozanidis and O. Hatzikonstantinou (2010). “Production scheduling of a multi-grade PET resin plant”. *Computers & Chemical Engineering*, in press.

A6. G. Kozanidis (2009). “Solving the linear multiple choice knapsack problem with two objectives: profit and equity”. *Computational Optimization and Applications*, 43(2): 261-294.

A5. G. Kozanidis (2009). “A multiobjective model for maximizing fleet availability under the presence of flight and maintenance requirements”. *Journal of Advanced Transportation*, 43(2): 155-182.

A4. G. Liberopoulos, G. Kozanidis and P. Tsarouhas (2007). “Performance evaluation of an automatic transfer line with massive scrapping of material during long failures”. *Manufacturing & Service Operations Management*, 9(1): 62-83.

A3. G. Kozanidis, E. Melachrinoudis and M. Solomon (2005). “The linear multiple choice knapsack problem with equity constraints”. *International Journal of Operational Research*, 1(1-2): 52-73.

A2. G. Kozanidis and E. Melachrinoudis (2004). “A branch & bound algorithm for the 0-1 mixed integer knapsack problem with linear multiple choice constraints”. *Computers & Operations Research*, 31(5): 695-711.

A1. E. Melachrinoudis and G. Kozanidis (2002). “A mixed integer knapsack model for allocating funds to highway safety improvements”. *Transportation Research Part A: Policy and Practice*, 36(9): 789-803.

ARTICLES PUBLISHED IN INTERNATIONAL SCIENTIFIC CONFERENCE PROCEEDINGS

B8. P. Andrianesis, G. Liberopoulos and G. Kozanidis (2009). “Energy-reserve markets with non-convexities: an empirical analysis”. Proceedings of the *IEEE PowerTech Conference*, Bucharest, Romania, June 28 - July 2, 8 pages.

B7. P. Andrianesis, G. Liberopoulos and G. Kozanidis (2008). “Energy and reserve interaction in the greek electricity market”. Proceedings of the *6th Mediterranean Conference and Exhibition on Power Generation, Transmission and Distribution*, Thessaloniki, Greece, November 2-5, 6 pages.

B6. G. Kozanidis, A. Gavranis and G. Liberopoulos (2008). “Heuristics for maximizing fleet availability subject to flight and maintenance requirements”. Proceedings of the *10th International Conference on Application of Advanced Technologies in Transportation*, Athens, Greece, May 27-31, 15 pages.

B5. G. Kozanidis and E. Melachrinoudis (2006). “The linear multiple choice knapsack problem with two criteria: profit and equity”. E-proceedings of the *18th International Conference on Multiple Criteria Decision Making*, Chania, Greece, June 19-23, 11 pages.

- B4. G. Kozanidis and A. Skipis (2006).** “Flight and maintenance planning of military aircraft for maximum fleet availability: a biobjective model”. E-proceedings of the 18th *International Conference on Multiple Criteria Decision Making*, Chania, Greece, June 19-23, 11 pages.
- B3. A. Ziliaskopoulos and G. Kozanidis (2006).** “Dynamic programming strategies for the dial a ride problem with time window constraints”. 85th *Annual Meeting of the Transportation Research Board CD-ROM*, Washington, DC, USA, January 22-26, 12 pages.
- B2. G. Liberopoulos, G. Kozanidis and P. Tsarouhas (2005).** “Analysis of a bufferless, paced automatic transfer line with massive scrapping of material during long failures”. Proceedings of the 5th *International Conference on Analysis of Manufacturing Systems - Production Management*, Zakynthos, Greece, May 20-25, 119-126.
- B1. G. Kozanidis, E. Melachrinoudis and M. Solomon (2002).** “A bicriteria model for optimal allocation of resources among disjoint sets of discrete and continuous activities”. Proceedings of the 30th *International Conference on Computers & Industrial Engineering*, Tinos, Greece, June 28 – July 2, 479-484.

ABSTRACTS PUBLISHED IN INTERNATIONAL SCIENTIFIC CONFERENCE PROCEEDINGS

- C6. A. Gavranis and G. Kozanidis (2009).** “Modeling techniques and solution approaches for maximizing fleet availability of mission aircraft subject to flight and maintenance requirements”. 23rd *European Conference on Operational Research*, Bonn, Germany, July 5-8.
- C5. O. Hatzikonstantinou, G. Liberopoulos and G. Kozanidis (2008).** “A mixed integer linear program for production scheduling in a multi-grade PET processing plant”. *Computer Aided Process Engineering Forum* Poster Presentation, Thessaloniki, Greece, February 7-8.
- C4. G. Kozanidis, V. Katsaros and A.K. Ziliaskopoulos (2006).** “A unified framework for online decision making for emergency response”. *International Conference on Dynamics of Disasters*, Mati, Attica, Greece, October 5-7.
- C3. C. Mastrogiannidou, G. Kozanidis and A.K. Ziliaskopoulos (2006).** “A resource allocation problem for emergency management”. *International Conference on Dynamics of Disasters*, Mati, Attica, Greece, October 5-7.
- C2. G. Kozanidis, E. Melachrinoudis and M. Solomon (2001).** “Allocating funds to highway improvements under the presence of equity constraints”. *INFORMS Annual Conference*, Miami Beach, FL, USA, November 4-7.
- C1. G. Kozanidis and E. Melachrinoudis (2000).** “Allocating funds to highway improvements: a mixed integer knapsack model”. *INFORMS Annual Conference*, San Antonio, TX, USA, November 5-8.

PAPERS & ABSTRACTS PUBLISHED IN NATIONAL SCIENTIFIC CONFERENCE PROCEEDINGS

- D12. O. Hatzikonstantinou, G. Liberopoulos and G. Kozanidis (2009).** “Description and analysis of a dynamic scheduling model for the production of N products”. 21st *National Conference of the Hellenic Operational Research Society*, Athens, Greece, May 28-30.
- D11. G. Kozanidis and A. Gavranis (2008).** “Computational & numerical investigation of heuristics for maximizing fleet availability subject to flight & maintenance requirements”. 20th *National Conference of the Hellenic Operational Research Society*, Spetses, Greece, June 19-21, 12 pages.

- D10. O. Hatzikonstantinou, G. Liberopoulos and G. Kozanidis (2008).** “Numerical study on the production planning of a chemical industry.” *20th National Conference of the Hellenic Operational Research Society*, Spetses, Greece, June 19-21, 12 pages.
- D9. P. Andrianesis, G. Liberopoulos and G. Kozanidis (2008).** “Non-convexities in optimization problems, with application in electricity and reserve markets”. *5th Student Conference in Management Science & Technology*, Athens, May 8, 7 pages.
- D8. P. Andrianesis, G. Liberopoulos and G. Kozanidis (2008).** “Issues and mechanisms of the deregulated electricity market and of the reserve markets”. *2nd National Student Conference in Electrical and Computer Engineering*, Athens, Greece, April 18-19, 6 pages.
- D7. O. Hatzikonstantinou, G. Liberopoulos and G. Kozanidis (2007).** “Optimization of production scheduling in a PET resin chemical plant”. *19th National Conference of the Hellenic Operational Research Society*, Arta, Greece, June 21-23, 14 pages.
- D6. P. Andrianesis, G. Liberopoulos and G. Kozanidis (2007).** “Modeling the greek electricity market”. *19th National Conference of the Hellenic Operational Research Society*, Arta, Greece, June 21-23, 10 pages.
- D5. O. Hatzikonstantinou, G. Liberopoulos and G. Kozanidis (2007).** “Production scheduling of a multi-grade PET resin chemical plant”. *4th Student Conference in Management Science & Technology*, Athens, Greece, May 17, Vol. B: 224-231.
- D4. P. Andrianesis, G. Liberopoulos and G. Kozanidis (2007).** “Mechanisms of the electricity market”. *4th Student Conference in Management Science & Technology*, Athens, Greece, May 17, Vol. A: 8-15.
- D3. C. Mastrogiannidou, G. Kozanidis and A.K. Ziliaskopoulos (2006).** “Investigating the feasibility of deploying paratransit systems in rural communities in Greece”. *18th National Conference of the Hellenic Operational Research Society*, Kozani, Greece, June 15-17.
- D2. G. Liberopoulos, I. Tsikis and G. Kozanidis (2005).** “Inventory control in a duopoly: a dynamic non-cooperative game-theoretic approach”. *17th National Conference of the Hellenic Operational Research Society*, Rio-Patra, Greece, June 16-18, 14 pages.
- D1. G. Kozanidis and I. Georgas (2005).** “A greedy algorithm for the linear multiple choice knapsack problem with two objectives: profit and equity”. *17th National Conference of the Hellenic Operational Research Society*, Rio-Patra, Greece, June 16-18, 12 pages.

MISCELLANEOUS PUBLICATIONS

- E2. P. Andrianesis, G. Liberopoulos and G. Kozanidis (2009).** “Modeling the day-ahead scheduling problem in Greece’s wholesale electricity market”. *Celebrative Volume of the University of Thessaly*, Volos, Greece.
- E1. C. Mastrogiannidou, G. Kozanidis and A.K. Ziliaskopoulos (2006).** “Paratransit systems: a case study for the mount pelion region in Greece.” *Nova Terra*, 6: 18-22.

CITATIONS (excluding self-citations)

In ISI: 6
 In Scopus: 13
 In Google Scholar: 21
 In graduate theses and doctoral dissertations: 8
 In books: 1

REFEREE/REVIEWER IN INTERNATIONAL SCIENTIFIC JOURNALS

European Journal of Operational Research
Operational Research: An International Journal
Simulation Modeling Practice and Theory

REFEREE/REVIEWER IN SCIENTIFIC CONFERENCES

17^o National Conference of the Hellenic Operational Research Society (2005), Rio-Patra, Greece.
5th Annual IEEE Conference on Automation Science and Engineering (2009), Bangalore, India.
IEEE International Conference on Robotics and Automation (2010), Anchorage, AK, USA.

PARTICIPATION IN FUNDED RESEARCH SCIENTIFIC PROJECTS

Title: “Improvement of the material handling system at IMAS S.A.”, **Funded by:** IMAS S.A., **Contractor:** University of Thessaly, **Position:** Principal Investigator, **Budget:** 12,000 €, **Length:** 2007-2008.

Title: “Improvement of the inventory management system at IMAS S.A.”, **Funded by:** IMAS S.A., **Contractor:** University of Thessaly, **Position:** Principal Investigator, **Budget:** 12,000 €, **Length:** 2007-2008.

Title: “INMOSION, science shop for innovative mobility solutions for mobility challenged Europeans”, **Funded by:** CORDIS, Science and Society, **Contractor:** University of Thessaly, **Position:** Researcher, **Budget:** 135,000 €, **Length:** 2006-2009.

Title: “Process mapping of the material handling system in the conveyor belt industry IMAS S.A”, **Funded by:** IMAS S.A., **Contractor:** University of Thessaly, **Position:** Researcher, **Budget:** 4,900 €, **Length:** 2006.

Title: “Optimization of production planning and product distribution of a PET resin chemical plant”, **Funded by:** GSRT-PENED, V.P.I., S.A., **Contractor:** University of Thessaly, **Position:** Researcher, **Budget:** 42,045.45 €, **Length:** 2005-2008.

Title: “RESCUE, a catastrophe response and recovery transport and logistics decision support system”, **Funded by:** EU/INTERREG IIIc, **Contractor:** Region of Central Macedonia, **Position:** Researcher, **Budget:** 300,000 €, **Length:** 2004-2006.

Title: “Development of cooperative tools based on internet procedures for complex industrial applications”, **Funded by:** GSRT/ Coordinated program of e-commerce, **Contractor:** Hellenic Aerospace Industry S.A., **Position:** Researcher, **Budget:** 60,000 €, **Length:** 2003-2004.

TEACHING EXPERIENCE

Undergraduate courses:

- “Probability & Statistics for Engineers” (Northeastern University)
- “Engineering Economy” (Northeastern University)
- “Integer Programming & Combinatorial Optimization” (University of Thessaly)
- “Factory Administration & Planning” (University of Thessaly)
- “Statistical Quality Control” (University of Thessaly)

Graduate courses:

- “Scheduling – Project Management” (University of Thessaly)
- “Quality, Reliability and Maintenance Systems” (University of Thessaly)

Instructor in the MBA Program of the Hellenic Management Association in the Subjects:

- “Total Quality Management”
- “Project Management”

PROFESSIONAL & SCIENTIFIC AFFILIATIONS

Member of the Technical Chamber of Greece

Member of the Hellenic Operations Research Society

Member of the Institute for Operations Research and the Management Sciences

THESES SUPERVISION

Independent supervision of 9 undergraduate and 9 graduate theses. (University of Thessaly)

Participation in the supervision of 4 doctoral dissertations (2 completed, 2 in progress). (University of Thessaly)

AUTHOR'S WORK

Compilation of academic notes for the course "Integer Programming & Combinatorial Optimization" of the 7th semester of the undergraduate program of study of the Department of Mechanical & Industrial Engineering of the University of Thessaly.

CERTIFICATIONS

"Expert Level Teaching Assistant Accreditation", Center for Effective University Teaching of Northeastern University (2002)

"Teaching Assistant Training Orientation Program", Center for Effective University Teaching of Northeastern University (2001)

MILITARY OBLIGATIONS

15 month military service completed at the Hellenic Navy between January of 2003 and April 2004.