

# Dr. Pantelis Z. Lappas

## Personal Information

Desk Address 47a Evelpidon Str. and 33 Lefkados Str., GR-11362, Athens, Greece  
Date of birth 12 April 1985  
Military Service Fulfilled 2010  
Marital Status Married  
Nationality Greek  
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## Research and Professional Interests

Supply Chain Optimization, Production Planning, Inventory Control, Vehicle Routing, Stochastic Modelling, Simulation, Queuing Theory, Game Theory, Processing, Numerical Analysis, Evolutionary Programming, Multi-criteria Decision Making, Risk Management, Information Systems and Applications Development

## Educational Background

2010 – 2017  
Name and type of organisation providing education and training Doctor of Philosophy (PhD) in Operations Research  
Athens University of Economics and Business, School of Business, Department of Management Science and Technology, Management Science Laboratory

2011 – 2013  
Name and type of organisation providing education and training Master of Science (MSc) in Statistics (Specialization in Quantitative Methods in Decision Making)  
Athens University of Economics and Business, School of Information Sciences and Technologies, Department of Statistics

2010 – 2011  
Name and type of organisation providing education and training 1-Year Pedagogical Training Program (Pedagogical and Didactic Competence)  
School of Pedagogical and Technological Education, Department of Education

2008 – 2010  
Name and type of organisation providing education and training Master of Science (MSc) in Information Systems (Specialization in Business Information Systems)  
Athens University of Economics and Business, School of Information Sciences and Technologies, Department of Informatics

2003 – 2007  
Name and type of organisation providing education and training Bachelor of Science (BSc) in Informatics Engineering  
Technological Educational Institute of Athens, School of Technological Applications, Department of Informatics Engineering

## Work Experience

2016 – Present  
Main activities and responsibilities Senior Business Analyst  
Strategic planning by identifying the organization's business needs. Business model analysis by defining the organization's policies and market approaches. Process design by standardizing the organization's workflows and system analysis.

Name and address of employer Relational SA, 52 Pisistratou Str., GR-17674, Kallithea, Athens, Greece

2010 – 2016  
Main activities and responsibilities Doctoral Researcher / Lab Administrator / Teaching Assistant  
Optimization algorithms for the inventory routing problem, analysis and design of "AUEB Digital Services" information system, chief knowledge officer of Management Science Laboratory / Web and domain administration, technical support and equipment audits, CRM system analysis, design and administration / Primary lab instructor in Enterprise Information Systems (MSc course), Managerial Decision Making (MSc course), Enterprise Resource Planning Systems (BSc course), Modern Enterprise Information Systems (Erasmus course) and Mathematics for Decision Making (BSc course).

Name and address of employer Athens University of Economics and Business, 76 Patision Str., GR-10434, Athens, Greece

2014 – 2016	Researcher / Independent Consultant
Main activities and responsibilities	Analysis and design of information system, implementation of web application, multi-criteria decision analysis and project management (Project: Market Mapping – The Case of Greece). Analysis, design and implementation of an information system for capturing the value chain of products and services (Project: Value chain design, evaluation and mapping). Implementation of multi-criteria decision analysis for optimal allocation of the limited financial resources in the municipalities of the Region of Western Greece in order to maximize the social benefit (Project: Integrated Intervention in Fire-stricken Areas).
Name and address of employer	Centre of Planning and Economic Research, 11 Amerikis Str., GR-10672, Athens, Greece
2007	Internship
Main activities and responsibilities	Credit assessment system update, implementation of projects using M/S Access and M/S Excel, implementation of application using Visual Basic related to solvency assessment for insurance companies.
Name and address of employer	National Bank of Greece, Directorate of Risk Management, 68 Akadimias Str., GR-10678, Athens, Greece

## Publications

### Thesis and Dissertations

- Lappas, P. (2017). *Models and Solution Algorithms for Inventory Routing Problems* (Doctoral Dissertation).
- Lappas, P. (2013). *Numerical Methods and Optimization: A MATLAB Approach* (Master's Thesis). [In Greek]
- Lappas, P. (2011). *Research Methodology and Evaluation* (Master's Thesis). [In Greek]
- Lappas, P. (2010). *Key Success Factors and Risk Management in Project Management* (Master's Thesis). [In Greek]
- Lappas, P. (2007). *Organization of Conference and Implementation of Supportive Application using a CMS Tool* (Bachelor's Thesis). [In Greek]

### Books, Chapters and Edited Volumes

- Kritikos, M., Lappas, P., & Metzidakis, T. (2018). Combinatorial Optimization: Problems and Solution Methods, Chapter in "100 years of Hellenic Mathematical Society" (Forthcoming). [In Greek]
- Lappas, P., & Kiohos, A. (2013). *Operational Risk: Theory, Research Perspectives and a Proposed Research Approach*. Thessaloniki, GR: University of Macedonia Press.

### Scientific Journals

- Lappas, P., Kritikos, M., & Ioannou, G. (2018). A Hybrid Evolutionary Optimization Algorithm for the Inventory Routing Problem. *International Journal of Operations and Quantitative Management*, 24(2) (Forthcoming).
- Lappas, P., & Kritikos, M. (2018). Teaching and Learning Numerical Analysis and Optimization: A Didactic Framework and Applications of Inquiry-based Learning. *Higher Education Studies*, 8(1), 42-57. <https://doi.org/10.5539/hes.v8n1p42>
- Lappas, P., Kritikos, M., & Ioannou, G. (2017). A Two-phase Solution Algorithm for the Inventory Routing Problem with Time Windows. *Journal of Mathematics and System Science*, 7(9), 237-247. doi:10.17265/2159-5291/2017.09.001
- Lappas, P., & Kritikos, M. (2013). WebQuest Educational Scenario for the Numerical Solution of Equations using Pseudocode, MATLAB, CMAP and Rubrics. *ASTROLAVOS – Journal of New Technologies* 19, 59-76. [In Greek]

### Scientific Conferences and Meetings

- Lappas, P., Kritikos, E., Ioannou, G., & Burnetas, A. (2017). A Combination of Monte-Carlo Simulation and a VNS Meta-heuristic Algorithm for solving the Stochastic Inventory Routing Problem with Time Windows. Paper presented at the Proceedings of the International Conference on Optimization and Decision Science (Italy), Sorrento 4-7 September.
- Lappas, P., Kritikos, E., & Ioannou, G. (2015). Metaheuristic Algorithms for Routing Problems: From the Travelling Salesman Problem to the Inventory Routing Problem. Paper presented at the Proceedings of the MASSEE International Congress on Mathematics (Greece), Athens 22-26 September.

Lappas, P., & Kritikos, M. (2015). The Supply Chain Network Design Problem: Quantitative Approaches to managing Operational and Disruption Risks. Paper presented at the Proceedings of the MASSEE International Congress on Mathematics (Greece), Athens 22-26 September.

Lappas, P., Kritikos, M., & Ioannou, G. (2015). Classic Metaheuristics and Evolutionary Optimization Algorithms for Routing Problems: A Computational Study. Paper presented at the Proceedings of the 4<sup>th</sup> International Eurasian Conference on Mathematical Sciences and Applications (Greece), Athens 31 August - 3 September.

Lappas, P., Kritikos, M., & Ioannou, G. (2015). A Genetic Algorithm for the Inventory Routing Problem with Time Windows. Paper presented at the Proceedings of the 27<sup>th</sup> European Conference on Operational Research (Scotland), Glasgow 12-15 July.

Lappas, P., & Kritikos, E. (2015). Computer-based Cognitive Tools in Mathematics and Operations Research: The Process of Scientific Inquiry. Paper presented at the Proceedings of the ERPA International Congresses on Education (Greece), Athens 4-7 June.

Lappas, P., Kritikos, M., Chaniotaki, C., Lardopoulou, C., & Gotsi, A. (2015). An Educational Scenario in the context of Scientific Process: Numerical Solutions of Equations and Systems of Equations using Cognitive Tools. Paper presented at the Proceedings of the 12<sup>th</sup> Management Science and Technology Student Conference (Greece), Athens 14 May. [In Greek]

Lappas, P. (2015). Prioritizing Projects to enhance Development Impact: Multi-criteria Decision Analysis Approach. Paper presented at the Proceedings of the 4<sup>th</sup> Annual Conference of the Centre of Planning and Economic Research (Greece), Kyllini 8-10 May. [In Greek]

Lappas, P. (2015). Mathematical Models and Exact Solutions for the Inventory Routing Problem. Paper presented at the Proceedings of the Meeting of Doctoral Students on Economics (Greece), Centre of Planning and Economic Research, Athens 16 January. [In Greek]

Lappas, P., Kritikos, M., Ioannou, G., & Burnetas, A. (2014). The Inventory Routing Problem. Paper presented at the Proceedings of the 31<sup>st</sup> Conference of the Hellenic Mathematical Society (Greece), Veria 7-9 November. [In Greek]

Lappas, P., & Kritikos, M. (2013). A Didactic Model for the Course of Applied Numerical Analysis using MATLAB, CMAP and WebQuest. Paper presented at the Proceedings of the 30<sup>th</sup> Conference of the Hellenic Mathematical Society (Greece), Karditsa 8-10 November. [In Greek]

**Personal Skills and Competences**

Mother tongue(s) Greek

Other language(s) English (C1 Proficient User)

**Social Skills and Competences**

Ability to work effectively into teams, communicate successfully, use analytical and logical skills and cope under pressure. Member of the (a) Hellenic Operational Research Society (since 2014), (b) Hellenic Mathematical Society (since 2013) and (c) Editorial Board of ASTROLAVOS – Scientific Journal of Hellenic Mathematical Society (since 2013). Good communication skills gained through teaching experience (since 2012) at Athens University of Economics and Business.

**Organizational Skills**

Organizational and problem solving skills through daily challenges to achieve results. Able to gather and synthesize information on internal and external environments. Able to analyze and design organizational structures and processes. Project management experience, including organization of international meetings, workshops and conferences (Member of the Organizing Committee of (a) 30<sup>th</sup> Conference (2013), (b) 31<sup>st</sup> Conference (2014) and (c) 32<sup>nd</sup> Conference (2015) of the Hellenic Mathematical Society (Greece). Chair of the session “Quantitative Methods” at 12<sup>th</sup> Student Conference of the Department of Management Science and Technology (Greece, 2015). Chair of the session “Integrated Logistics” at 27<sup>th</sup> European Conference on Operational Research (Glasgow, Scotland, 2015)). Good experience in planning and conducting courses activities.

Computer Skills	<ul style="list-style-type: none"> <li>▪ Computer Literacy: Microsoft's Operating Systems</li> <li>▪ M/S Office (Access, Excel, Outlook, PowerPoint, Word)</li> <li>▪ Apache Open Office (Writer, Calc, Impress, Draw, Math, Base)</li> <li>▪ M/S Office Visio, M/S Project</li> <li>▪ M/S Dynamics NAV</li> <li>▪ Object-oriented Programming Languages: C++, Java, Ruby, Python</li> <li>▪ Structured Programming Languages: C, PASCAL</li> <li>▪ Visual Programming Languages: Visual Basic</li> <li>▪ Procedural Programming Languages: Fortran</li> <li>▪ Functional Programming Languages: Lisp</li> <li>▪ Query Languages: SQL</li> <li>▪ Database Systems: MySQL, M/S SQL Server, Oracle</li> <li>▪ Unified Modelling Language (UML): StarUML, Rational Rose</li> <li>▪ Statistical Computing and Graphics: R</li> <li>▪ Symbolic Mathematical Computation Program: Mathematica</li> <li>▪ Software Packages for Computational Mathematics: MATLAB, GNU Octave</li> <li>▪ Statistical Software Packages: MINITAB, SPSS, STATA</li> <li>▪ Software Packages for Multi-criteria Decision Analysis: Expert Choice, Transparent Choice, PriEsT</li> <li>▪ Simulation Software Packages: ARENA, YASAI, @RISK</li> <li>▪ Software Packages for Decision Trees: Precision Tree, Simple Decision Tree</li> <li>▪ Mathematical Programming Languages: MPL (with CPLEX), AMPL (with CPLEX)</li> <li>▪ Document Preparation System for High-quality Typesetting: LaTeX</li> <li>▪ Markup Language: HTML</li> <li>▪ Scripting Language: PHP</li> <li>▪ Website Design Software Packages: Web Page Maker, Joomla CMS</li> <li>▪ Business Process Model and Notation (BPMN)</li> </ul>
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Other Skills Teaching experience at University Level (BSc level (including Erasmus students) and MSc level)

Driving Licence Category A, Category B

## Scholarships and Awards

2015	Award for the paper "Mathematical Models and Exact Solutions for the Inventory Routing Problem" based on PhD thesis from the Centre of Planning and Economic Research.
2013	Excellence award and distinction (Grade: 9.09/10, 1 <sup>st</sup> in Class) in the Master of Science in Statistics with specialization in Quantitative Methods in Decision Making.
2008	Bachelor scholarship for the Academic Year 2006-2007 (1 <sup>st</sup> in Class and 8 <sup>th</sup> among 77 graduates in graduation of 2007) from the Greek State Scholarship Foundation and award for the Bachelor's thesis (Grade: 10/10).
2003	Progress Award and Distinction in the 3rd Class of Unified Upper Secondary School.
2002	Progress Award and Distinction in the 2nd Class of Unified Upper Secondary School.