# Andreas C. Georgiou

# Professor of Operations Research University of Macedonia

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## **Research interests**

Quantitative Methods in Business
Analytics, Stochastic modelling and
Markov chains, Operations Research and
Machine Learning models in Operations,
MKT and Healthcare, Simulation models,
Multiple Criteria Optimization, AHP,
efficiency evaluation DEA.

## **Teaching Experience**

**Aristotle University of Thessaloniki:** Stochastic Methods in Operational Research, Mathematical Programming II, Non-Linear Optimization, Statistics

**University of Macedonia, undergraduate courses:** Quantitative Analysis for Business Decisions I (QA-I), Quantitative Analysis for Business Decisions II, Operational Research (former QA – I), Methods for Business Decisions Analysis (former QA-II), Applied Decision Making Laboratory, Simulation Techniques in Management Science, Special Topics on Quantitative Methods, Business Mathematics

**Greek Open University, undergraduate courses**: Quantitative Methods in Business (Business Mathematics, Statistics, Operational research)

**University of Macedonia, graduate courses:** Decision Making Tools and Optimization, Quantitative Methods in Healthcare, Operations Management and Decision making, Quantitative Analysis of Business Decisions, Operational Research and Simulation, Quantitative Methods in Decision Analytics, Management Science in Business Analytics, Operations Management, Business Games Laboratory

## Masters and PhD dissertations, supervision and examiner

Supervised a considerable number of undergraduate and postgraduate essays, assignments and dissertations at the Aristotle University of Thessaloniki and the University of Macedonia. An indicative list of PhD dissertations I have served as an examiner is the following: Dpt of Business Administration University of Macedonia: Kalampokis Evangelos, Peristeras Vasileios, Mylona Evangelia, Mavrodi Afentoula, Kloutsiniotis Panagiotis, Staiou Eythimia, Giannikis Stefanos, Dpt of Applied Informatics University of Macedonia: Michalopoulos Evangelos, Ploskas Nikolaos, Dpt of Mathematics Aristotle University of Thessaloniki: Moysiadis Theodoros, Dimitriou Vasileios, Vasileiadis Georgios, Dpt of Economics, University of Macedonia: Printzis Panagiotis (in public defense process), Greek Open University: Flokou Aggeliki. University of Ulster, School of Computing: Zeeshan Tariq. Finally, two doctoral theses have been successfully completed under my supervision (K. Kamvysi and G. Paltayian).

## Academic Experience and other Activities (indicative list)

- OR and Statistics Professional, Software Development, 1991-95.
- Memberships: Greek Mathematical Society, Greek Operational Research Society, Greek Statistical Institute, Institute of Operations Research and Management Science (INFORMS), Operational Research Society (OR Society), European Network for Business and Industrial Statistics (ENBIS), Multiple Criteria Decision-Making Society (MCDM), International Society for Efficiency and Productivity Analysis (ISEAPA).
- Project: «Control in nonhomogeneous Markov systems. The NHS of Greece". Member of research team. 1988-90.
- Project: «New aspects of NHMS». Member of research team. 1994-95.
- Project: «Information Base of fur industry». Member of research team. 1995.
- Project: Teaching at the Agricultural University of Tirana, Albania. 1996.
- Project: «Networking career offices of Greek Universities», 1997-1999.
- Organizing Committee, 4<sup>th</sup> Balkan OR Conference, 1997.
- Organizer, workshop European Credit Transfer System (ECTS) (in cooperation with ECTS Counsellor and IKY). 1997.
- Project EPEAEK, «Students Placement for Practical Training, 1997-98.
- Project EPEAEK, «restructuring Programs of Study using Information Systems", 1997-2000.
- Project EPEAEK, «Restructuring the Graduate program of study", 2000.
- Project EPEAEK, «Vocational training at the University of Macedonia", 1997-2000.
- Project ADAPT, «Adapting Workplace in e-commerce environment", 1998-2000.
- Key speaker, «Continuous Professional Training", University of Macedonia, 23/2/98.
- Key Speaker, «The Vocational Training Program of the University of Macedonia", 14/10/98.
- Project, «Optimization of waste management, Municipality of Thessaloniki», 2000-2001.
- Project, «Protype Software and business game for based on BBS», 2002.
- Project leader, Placement and practical training", University of Macedonia, 01/09/01 to 2005.
- Organizing committee, 16<sup>th</sup> National Conference of OR. Member of the relevant committee for several years on.
- Project, «Technological Foresight in the area of Western Macedonia" 2003.

- Project Heraclitus, research Leader (2010-2014).
- Editorial Advisory Board, Decision Support Systems in Agriculture, Food and the Environment (IGI Global).
- Organising Committee, DEA 2011, 9th International Conference on Data Envelopment Analysis, Thessaloniki, 2011.
- Organising Committee, 1<sup>st</sup> International Symposium & 10th Balkan Conference on OR, Thessaloniki, 2011.
- Organising Committee, Markov & Semi Markov Processes and Related fields, Porto Carras, 2011.
- Editorial Board, International Journal of Systems Science: Operations & Logistics, Taylor & Francis.
- Scientific Committee of Global Conference on Services Management, Volterra, 2017.
- Director of the MBA program (2010-2017 and 2022-today)
- Director of the Graduate program in Business Analytics and Data Science (2017-2020).
- Advisory Board Elsevier
- Guest Editor, Mathematics Journal, Special Issue on Stochastic Markov chains, Stochastic Processes and related emerging fields (2020-21), MDPI
- Topic editor, Mathematics Journal, MDPI
- Associate Editor, European Journal of Mathematics and Applications
- Director of the Quantitative Methods and Decision Analysis Laboratory
- Editorial Board, International Journal of Systems Science: Operations & Logistics
- Editorial Board, Mathematics Journal, MDPI
- Project HFRI, 3154, Network Data Envelopment Analysis, Multilevel and Markovian Models and Applications, NET M-iDEA-A
- Scientific Committee, 1st International Conference on Mathematics and Applications, 1-15 May, 2023.
- Scientific Committee, DEA45 (University of Surrey, 2023)
- Member of the Organizing committee, Smart World Congress 2023, PROMISE Workshop, Portsmouth, UK.

## Conference Presentations, Proceedings, Journal and Volume Publications

## **National Conferences, Books of Abstracts**

- 1<sup>st</sup> Greek Statistical three-day meeting, 1985.
- 5<sup>th</sup> National Statistical Conference, Volos, 1992.
- A.C. Georgiou and N. Tsantas, «Periodicity of Markovian Models in a stochastic environment», 6<sup>th</sup> National Statistical Conference, University of Macedonia, 1993.
- A.C. Georgiou and N. Tsantas, «Ergodic problems in non-homogeneous cyclic behavior in a deterministic and stochastic environment», 7<sup>th</sup> National Statistical Conference, Nicosia, Cyprus, 1994.
- E. Angelis, A. C. Georgiou and A. Papadopoulou, «A stochastic simulation of cash budget in the public sector», 9<sup>th</sup> National Statistical Conference, Xanthi, 1996.
- A.C. Georgiou, A. Petridis and A. Koumpis, «A model of optimal exploiting network partnerships», 12<sup>th</sup> National OR Conference, Samos, 1998.
- A.C. Georgiou and V. Vamvoura, «A DEA application in Educational units evaluation», 19<sup>th</sup> National OR Conference, Arta, 2007.
- E. Michalopoulos, A. Georgiou and K. Paparrizos, "Risk-Based payment predictions for European Operational Programs", 19<sup>th</sup> National OR Conference, Arta, 2007.
- A.C. Georgiou, G. Paltayian, K. Gotzamani and A. Andronikidis «A QFD model combined with AHP and ANP in banking networks», 20th National OR Conference, TEI Piraeus, Spetses 2008.
- V.A. Dimitriou, N. Tsantas and A.C. Georgiou, "Modelling departmental mobility in continuous time, a non-homogeneous case", 32<sup>nd</sup> National Statistics Conference, Ioannina, 2019

## **National Conferences, Publications in Proceedings**

- A.C. Georgiou & K. Kouskouras, «Investigation and Simulation of Software Development Processes», 16th National OR Conference, Larisa, 2003.
- A.C. Georgiou, G. Tsiotras, A. Papadopoulos and A. Salonikidou «Crew rostering in waste management», 16th national OR Conference, Larisa, 2003.
- A. C. Georgiou, A. Kyriakidou, «Analysis and decision making of an ER department using discrete event simulation», 17th National OR Conference, Patra, 2005.
- E. Tsagalidis and A.C. Georgiou, «Using simulation modelling to support decisions in hail suppression programmes with airborne means», 18th National OR Conference, Kozani, 2006.
- E. Michalopoulos, A. C. Georgiou and K. Paparrizos, "Risk assessment and quality management of European regional operational programs", 18th National OR Conference, Kozani, 2006.

## **International Conferences Abstracts**

- P-C.G. Vassiliou and A.C. Georgiou, "Asymptotically Attainable Structures in Non-Homogeneous Markov Systems", presented at the 17th European Meeting of Statisticians, Satellite Conference on Stochastic Systems, Thessaloniki, 1987.
- L. Angelis, Georgiou A.C. and Papadopoulou A., "A cash budget stochastic simulation in the Greek public sector", presented at the Joint conferences, INFORMS XXXIV EURO XV, Barcelona, 1997.
- A.C. Georgiou and N. Tsantas, "Cost Models in Manpower Systems, an Inventory Approach", presented at the Joint conferences, INFORMS XXXIV EURO XV, Barcelona, 1997.

- M. Litsardakis, I. Ntampizas, G. Tsimpoukas, C. Tsissios, A.C. Georgiou and N. Metaxas, «An Investigation of Capacity Oriented Production Planning; The Case of a Tile Company in Northern Greece», presented at the 4th Balkan conference on Operational Research, Thessaloniki, 1997.
- Y.A. Hajidimitriou and A.C. Georgiou, «International Site Selection for Greek Firms», presented at the 4th International Symposium on Quantitative Methods, University of the Aegean, Chios, 1998.
- Y.A. Hajidimitriou and A.C. Georgiou, «A Quantitative Approach for Partner Selection in International Joint Ventures», presented at the 5th International Congress of the Economic Society of Thessaloniki, Dimokritian University of Thrace, Komotini, 1998.
- A. I. Economides, C. Karagiannidis and A C. Georgiou, «Acceptability Evaluation of Web Based Courses», presented at the 19th World Conference on Open Learning and Distance Education, Vienna, 1999.
- A.C. Georgiou, Y.A. Hajidimitriou and D.E Porgianos, «A Quantitative Approach in Selecting a Foreign Market Entry Strategy», EURO XVII, presented at the 17th European Conference on Operational Research, Budapest, 2000.
- N. Tsantas and A.C. Georgiou, "Sequences of n-step interval maintainable sets of a population model in a stochastic environment", presented at the EURO2001, Rotterdam, 2001.
- A.Karagiannidis, A.Papadopoulos, A.C. Georgiou, G. Tsiotras "Optimizing the collection and transport of urban solid wastes in a metropolitan municipality in Greece", presented at the Joint International Meeting of EURO/INFORMS, Constantinople, 2003.
- A.C. Georgiou, Y.A. Hajidimitriou, «A Goal Programming model for Business Expansion Decisions», EURO XX, presented at the 20th European Conference on Operational Research, Rhodes, 2004.
- E. Michalopoulos, A.C. Georgiou and K. Paparrizos, «A Unified Risk-Cost-Benefit Approach for Quality Management of European Union Regional Programs», EURO XXI, presented at the 21st European Conference on Operational Research, Iceland, 2006.
- A.C. Georgiou, G. Livadarou, K. Gotzamani and A. Andronikidis, "Combining AHP and SERVQUAL in measuring financial services quality", EURO XXII, presented at the 22nd European Conference on Operational Research, Prague, 2007.
- E. Michalopoulos, A.C. Georgiou and K. Paparrizos, «The use of Analytical Hierarchy Process in the Risk Management of European regional Operational programs», EURO XXII, presented at the 22nd European Conference on Operational Research, Prague, 2007.
- Y.A. Hajidimitriou and A.C. Georgiou, «International Franchising: A country selection problem", EURO XXII, presented at the 22nd European Conference on Operational Research, Prague, 2007.
- A.C. Georgiou, K. Gotzamani, A. Andronikidis and G.N. Paltayian, «Introducing a modified QFD design for quality improvement in the Greek banking sector», EURO XXIII, presented at the 23rd European Conference on Operational Research, Bonn, 2009.
- A.C. Georgiou, K. Gotzamani, A. Andronikidis and G.N. Paltayian, "A combined QFD, AHP and ANP approach for quality improvement and capacity expansion in the Greek Banking sector: Some Preliminary Results", presented at the 11th QMOD Conference, Lunds University, Sweden, 2008.
- G.N. Paltayian, A.C. Georgiou, K. Gotzamani and A. Andronikidis "An integrated AHP ANP Quality Function Deployment framework for the competitive position improvement', EURO XXIV, 24th European Conference on Operational Research, Lisbon, 2010.
- A.C. Georgiou, "Investigating Aspirations, Priorities and Optimization Opportunities in Markov Manpower Planning Models", EURO XXIV, 24th European Conference on Operational Research, Lisbon, 2010.
- Andreas Andronikidis, Andreas Georgiou, Katerina Gotzamani and Konstantina Kamvysi, «Integrating DEA framework into QFD methodology», DEA 2011, 9th International Conference on Data Envelopment Analysis, Thessaloniki, 2011.
- Vassilis Dimitriou, Andreas Georgiou and Nikolas Tsantas, ""Modeling intra and inter-departmental mobility via multivariate Markov process", MSMPRF 2011, Markov & Semi Markov Processes and Related fields, Porto Carras, 2011.
- G.N. Paltayian, A.C. Georgiou, K. Gotzamani and A. Andronikidis "An integrated model of Quality Function Deployment for financial organizations in an unstable economic environment', EURO-INFORMS MMXIII, 26th European Conference on Operational Research, Rome, 2013.
- Kamvysi, K., Gotzamani, K., Andronikidis, A. and Georgiou, A.C., "An Integrated QFD framework linking quality management with marketing efforts", 20th Conference of the International Federation of Operational Research Societies-IFORS "The art of Modeling", Barcelona, Spain, July 13-18, 2014.
- A. C. Georgiou, Kamvysi K., Gotzamani K. and Andronikidis A., «Utilizing Customer Requirements' Data to Link Quality Management and Services Marketing Objectives», 17th Conference of ASMDA International Society, London, UK, 2017.
- A. C. Georgiou, Kamvysi K., Gotzamani K. and Andronikidis A., « An appraisal of DEA contribution in the Quality Function Deployment Process in conjunction with some recent advances using Markov stochastic processes», DEA 40, International Conference of DEA: Celebrating the 40th Anniversary, Birmingham, UK, 2018.
- A.C. Georgiou, E. Thanassoulis and A. Papadopoulou, «Combining a Markov process model with the DEA framework A
  hybrid model in measuring the efficiency of alternative Markov manpower policies», EWEAP2019, XVI European Workshop
  on Efficiency and Productivity Analysis, London, UK, 2019.

- Mavrodi Afentoula, Georgiou Andreas, Tsiotras Georgios, Aletras Vassileios. Design of a survey tool to facilitate cluster analysis of determinants of Willingness-to-Pay per Quality-Adjusted Life-Year. 3rd World Congress on Public Health and Health Care Management. Dubai, UAE, 2019.
- Mavrodi Afentoula, Georgiou Andreas, Tsiotras Georgios, Aletras Vassilis. Development of an Instrument to Assess Participants' Motivation on Assigning a Monetary Value to a Quality-Adjusted Life-Year: Qualitative Interviews and Pilot Study. 21st International Conference on Health Economics. London, UK, 2019.
- Mavrodi A., Georgiou A., Tsiotras G., Aletras V. Reliability assessment of an instrument eliciting and interpreting willingnessto-pay values for quality of life improvement. 5th World Congress on Health Economics, Health Policy and Healthcare Management. Warsaw, Poland, 2019.
- Georgios Tsaples, Jason Papathanasiou, Andreas C. Georgiou and Nikolaos Samaras, «Assessing multidimensional sustainability of European countries with a novel, two-stage DEA», EmC-ICDSST 2019, 5th International Conference on Decision Support System Technology, Madeira. Portugal, 2019.
- Paltayian G.N., A.C. Georgiou, K. Gotzamani and A. Andronikidis "Redesigning e-Banking services: Social and Environmental Challenges towards Sustainable Development', EURO30, 30th European Conference on Operational Research, Dublin, 2019.
- Tsantas N., A.C. Georgiou and V. Dimitriou, "Elaboration on the multivariate non-homogeneous Markov manpower system under various conditions and properties, EURO30, 30th European Conference on Operational Research, Dublin, 2019.
- A.C. Georgiou, E. Thanassoulis and A. Papadopoulou, "Data Envelopment Analysis and Markov Chains", 19th Conference of Applied Stochastic Models and Data Analysis International Society, Athens, Greece, Virtual Conference, 2021.
- A.C. Georgiou, E. Thanassoulis and A. Papadopoulou, "Efficiency Evaluation in Markov manpower planning using Data Envelopment Analysis », 31st European Conference on Operational Research, Athens, Greece, Hybrid Conference, 2021.
- M. Aidinidou and A.C. Georgiou, "Analysis, Prioritization and Strategic Planning of Flood Mitigation Projects using AHP and GIS Environment", 31st European Conference on Operational Research, Athens, Greece, Hybrid Conference, 2021.
- K. Soukakos, K. Kaparis and A.C. Georgiou, "Evaluation of Wind Parks with Data Envelopment Analysis", 31st European Conference on Operational Research, Athens, Greece, Hybrid Conference, 2021.
- A.C. Georgiou, E. Thanassoulis and G. Tsaples, "Efficiency Evaluation and Markovian models, current state and research variants", 7<sup>th</sup> Stochastic Modelling Techniques and Data Analysis Conference, Athens, Greece, 2022.
- A.C. Georgiou, E. Thanassoulis, G. Tsaples, M-E. Vretta and K. Kaparis, "Data Envelopment Analysis with Markov models, current developments and research directions", XVII European Workshop on Efficiency and Productivity Analysis, Porto, Portugal, 2022.
- A.C. Georgiou, E. Thanassoulis, G. Tsaples, M-E. Vretta and K. Kaparis, "The introduction of Data Envelopment Analysis in Markovian settings. Hybrid models and extensions", 32<sup>nd</sup> EURO Conference, Aalto University, Espoo, Finland, 2022.
- A.C. Georgiou, G. Tsaples, E. Thanassoulis, "Markovian models in Data Envelopment Analysis, Single and multiple stage structures", IWAP 2023, 10th International Workshop on Applied Probability Thessaloniki, 2023.
- P. Kolias, A. Papadopoulou and A.C. Georgiou, "On the properties of inverted repeats and word frequencies in DNA sequences via semi Markov modeling", IWAP 2023, 10th International Workshop on Applied Probability Thessaloniki, 2023.
- E.-M. Vretta, K. Bitsis, K. Kaparis, G. Paltayian and A.C. Georgiou, "A hybrid bi-level DEA approach for resource allocation and targeting under stochastic conditions", IWAP 2023, 10th International Workshop on Applied Probability Thessaloniki, 2023.
- A.C. Georgiou, G. Tsaples, E. Thanassoulis, "Markov settings models in Data Envelopment Analysis, Multiple stages Multiple targets", DEA45, International Conference on Data envelopment Analysis, University of Surrey, 2023.
- K. Tarkasis, K. Kaparis and A.C. Georgiou, "Building trust in video classification", 6th International Conference on the Dynamics of Information Systems, Prague, 2023.

### **International Conferences Proceedings**

- A.C. Georgiou, "Nonstationary Cyclic Behaviour in Markov Systems", presented at the 6th International Symposium on Applied Stochastic Models and Data Analysis, Chania, Crete, 1993.
- A.C. Georgiou and N. Tsantas, "Periodicity of Markov Models in a Stochastic Environment", presented at the 2nd Balkan Conference in Operational Research, Thessaloniki, 1993.
- N. Tsantas, and A.C. Georgiou, «Partial maintainability of a Population Model in a Stochastic Environment», presented at the 7th International Symposium on Applied Stochastic models and Data Analysis, Dublin, 1995.
- L. Angelis, Georgiou A.C. and Papadopoulou A., "Determining Budget Balance Through Monte Carlo Techniques", presented at the 3rd Balkan conference in Operational Research, Thessaloniki, 1995.
- Karagiannidis, C., Koumpis, A., Stephanidis, C. and A.C. Georgiou, "Modelling Interactions as Queues". British Computer Society, presented at the FACS Workshop on Formal Aspects of the Human Computer Interface, Sheffield, UK, 1996.
- Y.A. Hajidimitriou and A.C. Georgiou, «Investigation of International Location Planning Techniques for the Balkan region», presented at the 4th Balkan conference on Operational Research, Thessaloniki, 1997.
- Y.A. Hajidimitriou and A.C. Georgiou, «Partner Selection in International Joint Ventures: A Multi-objective Approach», presented at the 5th International Conference of the Decision Sciences Institute, Athens, 1999.

- A.C. Georgiou and N. Tsantas, «Incorporating a Training Class in a Markovian Manpower Model», presented at the 5th International Conference of the Decision Sciences Institute, Athens, 1999.
- Y.A. Hajidimitriou and A.C. Georgiou, «Locational Decisions for a Franchising Firm in the Balkan Region », presented at the 1st International Conference of the ASECU, «Recent Economic Developments and Problems in the Transition Economies», University of Macedonia, Thessaloniki, 2000.
- Georgiou, A.C., Y.A. Hajidimitriou and D.E Porgianos, «The selection of Foreign Market Entry Strategies for European Firms», presented at the 28th European International Business Academy Conference, Athens, 2002.
- G. Tsiotras, A. C. Georgiou, A. Papadopoulos, A. Karagiannidis and P. Rakimbei, «Planning of interventions for the optimization of urban solid waste collection at municipal level», presented at the International Conference on the Protection and Restoration of the Environment VII, Myconos, 2004.
- E. Tsagalidis and A.C. Georgiou, «Simulation Modeling and Application of Aircraft Hail Suppression Programs», presented at the 5th EUROSIM Congress on Modeling and Simulation, Paris, 2004.
- Y.A. Hajidimitriou and A.C. Georgiou, «Critical Success Factors in Exporting: The case of Greek SMEs», presented at the 4th International Conference on New Horizon in Industry, Business and Education, Corfu, 2005.
- A. C. Georgiou, K. Gotzamani, A. Andronikidis. G. N. Paltayian, "A combined QFD, AHP and ANP for quality improvement and capacity expansion in the Greek Banking sector: Preliminary results", 11th QMOD Conference, Lunds University, Sweden, 2008.
- A. Andronikidis, A. C. Georgiou, K. Gotzamani, K. Kamvysi, "The application of quality function deployment in service quality management", 11th Toulon-Verona Conference "Excellence in Services", University of Florence, Italy, 2008.
- Kamvysi, K., Gotzamani, K., Georgiou, A.C. and Andronikidis, A., "Integrating DEAHP and DEANP into the Quality Function Deployment", 12th QMOD and Toulon-Verona Conference, Verona University, Verona, Italy, 2009.
- Andronikidis, A., Georgiou, A., Gotzamani, K. and Kamvisi, K., "Exploring Alternative Approaches in Prioritizing Consumers' Selection Criteria in a Service Setting", 39th EMAC Conference, The Six Senses, The Essentials of Marketing, Copenhagen Business School, Copenhagen, 2010.
- Kamvysi K., Gotzamani, K., Georgiou, A.C. and Andronikidis, A. "An Integrated QFD Approach for Bank Customers Satisfaction, 2nd Biennial International Conference on Services Marketing, Orchestrating the Service Experience: Music to the Ears of our Customers, The University of Macedonia, Thessaloniki, 2009.
- Vassilis Dimitriou, Andreas Georgiou and Nikolas Tsantas, "Modeling intra and inter-departmental mobility via multivariate Markov process", 1st International Symposium & 10th Balkan Conference on Operational Research, Thessaloniki, 2011.
- Andreas Tosis and Andreas Georgiou, "Modeling and Optimization of Job Scheduling in Concrete Pumping Operations", 1st International Symposium & 10th Balkan Conference on Operational Research, Thessaloniki, 2011.
- Andreas Georgiou, Konstantina Kamvysi, Andreas Andronikidis and Katerina Gotzamani "Advancing QFD to improve Service Quality", 1st International Symposium & 10th Balkan Conference on Operational Research, Thessaloniki, 2011.
- Kamvysi, K., Gotzamani, K., Georgiou, A.C. and Andronikidis, A., "An Extended Fuzzy QFD Methodology in the Design and Evaluation of Academic Courses", 14th QMOD, San Sebastian, 2011.
- Kamvysi, K., Andronikidis, A., Gotzamani, K. and A.C. Georgiou, "Listening to our customers in higher education institutions", 39th EMAC Conference, Marketing to Citizens: Going Beyond customers and consumers, ISCTE Business School, Lisbon, Portugal, 22-25 May 2012.
- Tsalianis, A., Thanassoulis, E. and A.C. Georgiou, "Greek thermal power plants evaluation using Data Envelopment Analysis", 4th International Symposium and 26th National Conference on Operational Research, Chania, Greece, 2015.
- Kamvysi, K., Gotzamani, K., Andronikidis, A. and A.C. Georgiou, "Incorporating a Multivariate Markov Chain model into Quality Function Deployment Framework", 16th Conference of ASMDA International Society, Athens, Greece, 2015.
- Aretoulis, G., Parisi, K., A.C. Georgiou, J. Papathanasiou, F. Antoniou and C. Triantafyllidis, "A Fuzzy Multicriteria Decision Analysis on selecting the Most Competent Project Manager considering Personality Traits and Project Procurement Systems", 5th International Symposium & 27th National Conference on Operational Research, Athens, 2016.
- V Aletras, A Georgiou, A Mavrodi, K Kaparis, I Konstantaras, V Sachpekidis, S Michailidou, T Gatzos, I Styliadis and P Stafylas, "Investigating Performance Indicators and Service Quality Improvement in an Outpatient Cardiology Department", ISPOR 19th Annual European Congress, 29 October-2 November 2016, Austria Center Vienna, Vienna, Austria.
- G.N. Paltayian, A.C. Georgiou, K. Gotzamani and A. Andronikidis "Combining Quality Management Tools with Quantitative Approaches to Improve E-Banking Operations.", Global Conference on Services and Management, Volterra, Italy, 2017.
- Kamvysi, K., Andronikidis, A., Georgiou, A.C and K. Gotzamani, "A QFD framework for sustainable supply chain management in tourism", International Conference on Tourism (ICOT2018), Kavalla, 27-30 June, 2018.
- Georgios Tsaples, Jason Papathanasiou, Andreas C. Georgiou and Nikolaos Samaras, «Assessing multidimensional sustainability of European countries with a novel, two-stage DEA», EmC-ICDSST 2019, 5th International Conference on Decision Support System Technology, Madeira. Portugal, 2019.
- G.N. Paltayian, A.C. Georgiou, K. Gotzamani "Using AHP and QFD in the investigation and refinement of e-banking services", International Symposium on AHP, 3-6 December, 2020, Pittsburgh based, online Conference. This paper and presentation received award of excellence.

- G.N. Paltayian, S. Xanthopoulou, E. Kessopoulou, A.C. Georgiou, K. Gotzamani "Defining Customer Satisfaction for eservices focusing on e-banking", Global Conference on Services and Retail Management, University of Naples Frederico II & University of South Florida, 10-13 May, 2021.
- Eleni-Maria Vretta, Kyriakos Bitsis, Konstantinos Kaparis, Georgios Paltagian and Andreas Georgiou, "A stochastic bilevel DEA-based model for resource allocation", 1st International Online Conference on Mathematics and Applications, IOCMA 2023.
- Tarkasis, K., Kaparis, K., & Georgiou, A. C. (2023, September). Introducing a New Metric for Improving Trustworthiness in Real Time Object Detection. In *International Conference on the Dynamics of Information Systems* (pp. 242-249). Cham: Springer Nature Switzerland.

#### **PhD Thesis**

A.C. Georgiou, «Control of the asymptotic behaviour of nonhomogeneous Markov systems», Statistics and Operational Research Section, Department of Mathematics, Aristotle University of Thessaloniki, 1989.

## **Academic Journals**

- Vassiliou, P.-C.G and Georgiou A.C. (1990). 'Asymptotically Attainable Structures in nonhomogeneous Markov Systems', *Operations Research*, 38(3), pp. 537-545. (SJR ranking: Q1).
- Vassiliou, P.-C.G, Georgiou A.C. and Tsantas N. (1990). "Control of Asymptotic Variability in nonhomogeneous Markov Systems", Journal of Applied Probability, 27(4), pp. 756-766. (SJR ranking: Q2)
- Georgiou, A.C. (1992). "Partial Maintainability and Control in nonhomogeneous Markov Manpower Systems", *European Journal of Operational Research*, 62(2), pp. 241-251. (SJR ranking: Q1)
- Georgiou, A.C. and Vassiliou P.-C.G. (1992). "Periodicity of Asymptotically Attainable Structures in nonhomogeneous Markov Systems", *Linear Algebra and Its Applications*, 176, pp. 137-174. (SJR ranking: Q2)
- Tsantas, N. and Georgiou A.C. (1994). "Periodicity of Equilibrium Structures in a Time Dependent Markov Model under Stochastic Environment", *Applied Stochastic Models and Data Analysis*, 10, pp. 269-277. (SJR ranking: Q1-Q2)
- Georgiou, A.C. and N. Tsantas (1996). "Non stationary cyclic behaviour in nonhomogeneous Markov systems", *Linear Algebra and Its Applications*, 237/238, pp. 549-578. (SJR ranking: Q2)
- Georgiou, A.C. and P.-C.G. Vassiliou (1997). "Cost Models in nonhomogeneous Markov Systems", European Journal of Operational Research, 100(1), pp. 81-96. (SJR ranking: Q1)
- Tsantas, N. and A.C Georgiou (1998). "Partial maintainability of a population model in a stochastic environment", *Applied Stochastic Models and Data Analysis*, 13, pp. 183-189. (SJR ranking: Q1-Q2)
- Georgiou, A.C. (1999). "Aspirations and Priorities in a Three Phase Approach of a Nonhomogeneous Markov System", European Journal of Operational Research, 116(3), pp. 565-583. (SJR ranking: Q1)
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## **Honorary Volumes**

- Hajidimitriou and A.C. Georgiou, «Country selection in the Balkans using multiple objective optimization», Honorary volume for Prof. V. Sarsentis, University of Piraeus, 1998.
- Andreas Georgiou, Katerina Gotzamani, Styliani Xanthopoulou, Konstantina Kamvysi and Andreas Andronikidis, «Application
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#### **Research in progress**

- Behavioral Economics in Health Care Management (with V. Aletras and P. Azas)
- Data Envelopment Analysis and Markov manpower modelling (with E. Thanassoulis and members of the QMeDa Lab)
- Bi-level Optimization, DEA and Markov models in Healthcare and Banking (a project of the Quantitative Methods and Decision Analytics Lab)

## **Lecture notes and Books**

- A.C. Georgiou and P.-C.G. Vassiliou, Non linear Optimization, methodology and algorithms, Ziti Publishers, Thessaloniki, 1993.
- G. Economou and A.C. Georgiou, Operational Research, Greek Open University, Patra, 2000.
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 Vasssiliou P.-C.G and A.C. Georgiou (eds), Markov and Semi-markov chains, Processes, Systems and Emerging related Fields, ISBN 978-3-0365-2399-6, MDPI Publishing, 2021.

## **Citations**

More than 1200 citations reported by Google scholar https://scholar.google.gr/citations?user=RrtBqUAAAAAJ&hl=en&oi=ao

#### **Academic Journal Reviewer**

ACM Transactions on Knowledge Discovery from Data, Afrika Matematika (AFMA), Advances in Fuzzy Systems, Applied Mathematics and Computation, Applied Stochastic Models in Business and Industry, Business Process Management Journal, Communications in Statistics, Computers and Industrial Engineering, Ecological Indicators, Educational Research and Reviews, ESAIM: Probability & Statistics, European Journal of Operational Research, Evaluation and Program Planning, Expert Systems with Applications, Future Generation Computer Systems, HELIYON, Industrial Management & Data Systems, Informatica, International Journal of Manufacturing Technology and Management, International Journal of Services Operations and Informatics, International Journal of Services Technology and Management, International Transactions in Operational Research, Journal of Intelligent Manufacturing, Journal of Manufacturing Technology Management, Journal of Modelling in Management, Journal of Service Science and Management, Journal of Statistical Computation and Simulation, Journal of Stochastic Analysis and Applications, Journal of the Operational Research Society, Mathematics (MDPI), Operational Research: An International Journal, Optimization Letters, Production Planning and Control, SIAM Journal on Matrix Analysis, Studies in Higher Education, Symmetry (MDPI), Total Quality Management and Business Excellence, Waste Management Journal.

## Participation and attending of continuous education and learning activities (recent)

- Accelerating Innovation using Design of Experiments, Phil Kay, SAS Institute, 18/2/2021.
- Second Workshop in Decision Making Methods and Techniques, Creating awareness of the usefulness of multiple criteria decision making techniques, University of Portsmouth, 24/2/2021.
- Geraint Palmer, Modelling Deadlock in Queueing Systems, 2021 Beale Lecture, the OR Society, 25/2/2021.
- What is effective Cyber Security in 2021?, NWORG (OR Society) March Event, Karl Hargrave, 10/3/2021.
- A short tour through Industrial Process Analytics, M.S. Reis, University of Coimbra, ENBIS on line seminars, 18/3/2021
- 10<sup>th</sup> Simulation Workshop Online (SW21), The Operational Research Society, March, 22-26, 2021.
- An Introduction to Soft OR, Martin Parr and Christina Philips, OR Society SIG, March, 29, 2021
- 3<sup>rd</sup> Institute of Mathematics and its Applications and OR Society Conference on Mathematics of Operational Research, 20-23 April, 2021.
- Reinforcement Learning with Knowledge Transfer for Residential Demand Response, Thijs Peirelinck, ENBIS Webinar Series, 4/5/2021.
- MATLAB EXPO 2021, 4/5 6/5/2021, online exhibitions and lectures.
- Statistically Speaking: Demystifying Machine Learning and Artificial Intelligence, SAS Institute seminars, 6/5/2021.
- European Network for Business and Industrial Statistics (ENBIS), Spring Meeting 2021, 17-18 May, 2021.
- Advancing a Culture of Data Analytics in the Process Industries through Statistics Education, ENBIS Spring post-Meeting JMP workshop, Phil Kay and Volker Kraft, 19/5/2021.
- Applying Machine Learning Models with Decisions, Decisions.com webinars, Tim Stahl and Tyler Haynes, 20/5/2021
- Data Envelopment Analysis with PIM-DEA software, Advanced Features, Ali Emrouznejad, Aston University, The OR Society Webinar Series, 26/5/2021.
- Using resources better: how modelling can help you improve your efficiency and effectiveness, Pro Bono Operational Research Webinar, Jane Parkin, 10/6/2021.
- Opportunities for Optimization in the Telecom Industry: Network Planning and Data Monetization, Guillermo González-Santander, Esther Fernández-Bravo and Julio Lema, Gurobi Optimization Webinars, 16/6/2021.
- Interpretability for Industry 4.0, ENBIS Online Workshop, Department of Industrial Engineering, Federico II University Napoli, 12-13 July, 2021
- Modern Statistical Modelling: A simpler, quicker way of extracting meaning from your data, Phil Kay, Data insight Webinar, SAS Institute Webinars, 29/7/2021
- COVID-19 Hospital Capacity Management using mathematical models, Kimia Ghobadi, Johns Hopkins University, Gurobi Optimization Webinars, 29/7/2021
- Soft OR and Problems Structuring Methods; Past, Present and Future, Frances O'Brien, Warwick Business School, PSM SIG, The Operational Research Society, 29/7/2021.
- Simulating at Lightening Speed, Tom Stepheson, The Operations research Society Webinars, 25/8/2021.
- European Network of Industrial Statistics Annual Conference, ENBIS-21 online conference, 13-15 September 2021.
- Survival Analysis, Volker Kraft, ENBIS Post-Conference JMP Workshop, 16/9/2021.
- Introduction to Structured Equation Modelling, ENBIS Webinar, Laura Castro-Schilo, JMP Division, SAS Institute, 7/10/2021.

- Machine Learning and Optimisation, Commonalities and Differences, Juergen Branke, University of Warwick, OR Society Webinars, 27/10/2021.
- Preparing Students for Data-Driven Problem Solving in the Chemical & BioPharma Industries, Andreas Trautmann, Volker Kraft and Paolo Chiappa, JMP Academic Webinar, SAS Institute, 9/11/2021.
- A Systems View of National Security, Anthony Finkelstein, Blacket Lecture 2021, Operational Research Society, November 11, 2021.
- Fault Detection and Diagnosis in High Dimensional Processes Using Model Driven Multivariate Control Charts, Jianfeng Ding and Jeremy Ash, ENBIS Webinars, 17/11/2021.
- Validate AI Online Conference, December 2-3, 2021, The OR Society
- Big Data Analytics for SMEs, Shirley Coleman and Pernille Ryden, ENBIS Webinars, 7/12/2021.
- Frontiers of Big Data, AI and Analytics: An Expansive View of Experimentation, Sean Taylor, Rideshare Labs at Lyft, 19/01/2022.
- Modern Power System Operation and Planning Under the Optimization Lens Confirmation, Alireza Soroudi, University College Dublin, Gurobi Optimization Webinars, 19/01/2022
- Statistical Significance and p-values, Daniël Lakens, Bernard G Francq, Stephen Senn, Ron S Kenett, ENBIS Webinars, 3/2/2022
- Valerie Belton, Multicriteria Matters, 2022 Beale Lecture, The OR Society, 17/2/2022.
- Decision, Decision, Decision! Third workshop in Decision Making Methods and Techniques, co-organized by INFORMS, EURO, OR Society, INFORMS Decision Analysis Society and the International Society on MCDM, 23/2/2022.
- Decision, Decision, Decision! 3rd Workshop in Decision Making Methods and Techniques, creating awareness of the usefulness of multicriteria decision making techniques, University of Portsmouth, Operations and Systems Management Group, 23/2/2022.
- Time series forecasting using ensemble and hybrid methodologies, Paulo Canas Rodrigues, Federal University of Bahia, Salvador, Brazil, ENBIS Webinar, 10/5/2022
- Reinforcement Learning Applications in the Healthcare and Pharma Industry, Elvan Gokalp, University of Bath, OR Society Webinars, 11/5/2022.
- Analytics, OR and AI Summit 2022, OR Society and Royal Statistical Society, 5<sup>th</sup> July, online, UK
- Beyond Jupyter Notebooks, MLOps Environment Setup and First Deployment, Greg Loughnane, FourthBrain, 28/9/2022
- Classmaps for Visualizing Classification Results, Jakob Raymaekers, Maastricht University, ENBIS Webinars, 29/9/2022
- Gamifying Optimization Education with the Burrito Optimization Game, Gurobi Academic Webinars, 29/9/2022
- Make better data-based decisions with statistical modelling techniques, 3-day Webinar, JMP/SAS Webinars-Chemistry World, 11-13 October, 2022.
- Review of Machine Learning applications for chemical and process industries, Antonio Del Rio Chanona, Mattia Vallerio, Francisco Jose Navarro-Brull, JMP & ENBIS Webinar, 3rd November, 2022.
- Effective Decision Making in Cash Logistics via Simulations with Mathematical Optimization, Mehmet Arikkan, CEO Arute Solutions, Gurobi Webinars, 23/11/2022
- Single Day Online Webinar on Network Data Envelopment Analysis, University of Bristol, 12/12/2022.
- Using Trained Machine Learning Predictors in Gurobi, Gurobi Academic Webinars, 2/2/2023
- Robert Dyson, Operational research through Seven Decades, 2023 Beale Lecture, The OR Society, 16/2/2023.
- Improving Mental Healthcare Services with Data Science and Analytics, University of Westminster, OR Society HSS SIG, one day event, 16/2/2023
- Digital Twins: Hype or Hope? M.A. Girolami, The Alan Turing Institute, ENBIS Webinars, 15/3/2023
- Designing Quantitative Research Studies with JMP, JMP Academic Webinar, Kevin Potcner, 26/7/2023
- Intro to JPM for Teachers, JMP Academic Webinar, Kevin Potcner, 10/8/2023
- Teaching Exploratory Data Analysis with JMP, JMP Academic Webinar, Kevin Potcner, 26/9/2023
- Gurobi Optimization 201 for Data Science Training, 9-10, November, 2023.
- Prompt Engineering for Open Source LLMs, Sharon Zhou, Lamini, 23/1/2024.
- Are pie charts Evil? An exploration of what makes data visualizations work, Andy Hill, OR Society Webinars, 31/01/2024.