PANAGIOTIS ANDREOPOULOS, PhD

Curriculum Vitae

pandreopoulos26@gmail.com | pandreop@hua.gr
ResearchGate: https://www.researchgate.net/profile/Panagiotis_Andreopoulos
LinkedIn: https://www.linkedin.com/in/panagiotis-andreopoulos-6b4a2282/ | ORCID: 0000-0002-7815-9295

PERSONAL DETAILS

Full name: Panagiotis Andreopoulos
Father's name: Konstantinos

EDUCATION

- PhD in Statistical Demography using Probability Distributions, School of Environment, Geography and Applied Economics, Department of Geography, Harokopio University of Athens (2021).

Doctoral thesis: Analysis of Mortality Data Using Probability Distributions and Cartographic Visualisations. https://www.didaktorika.gr/eadd/handle/10442/49250

- MSc in Statistics and Operations Research, School of Science, Department of Mathematics, National and Kapodistrian University of Athens (2012).

MSc thesis: Spatial Hidden Markov Poisson Models, with an Application to Disease Mapping.

- BSc in Mathematics, School of Science, Department of Mathematics, University of Ioannina (2010). Specialisation: Statistics.

RESEARCH INTERESTS

Statistical modelling; demographic data analysis; linear and generalised linear models; model selection criteria; variable selection; time series; statistical quality control; data mining; biostatistics; research methodology and applications of advanced statistical methods in health and social sciences; quantitative and qualitative research methods; probability distributions; forecasting models.

PROFESSIONAL AND TEACHING EXPERIENCE

- Mathematics Teacher, 2nd General Lyceum of Pefki, teaching Mathematics to students in Grades 10–12; academic year 2026–2027.
- Mathematics Teacher, 2nd Gymnasium of Pefki, teaching Mathematics to students in Grades 7–9; academic years 2024–2026.
- Mathematics Teacher, 1st Gymnasium of Lykovrysi, teaching Mathematics to students in Grades 7–9; academic year 2023–2024.
- "Statistical Analysis for Geographers": independent course delivery as an appointed lecturer, including lectures and R and SPSS programming labs, Department of Geography, Harokopio University of Athens, spring semester 2022–2023.
- Statistical Analyst, Research, Studies and Data Department, INEMY–ESEE (Institute of Commerce and Services of the Hellenic Confederation of Commerce and Entrepreneurship), May 2021–December 2022.
- "Numerical and Statistical Methods for Geographers": teaching assistant for practical classes using R and SPSS, Department of Geography, Harokopio University of Athens, winter semesters 2013–2020.
- "Applied Spatial Analysis – Statistics": teaching assistant for practical classes using R and SPSS, MSc in Applied Geography and Spatial Planning, Department of Geography, Harokopio University of Athens, spring semester 2015–2016.
- "Statistical Analysis for Geographers": teaching assistant for practical classes using R and SPSS, Department of Geography, Harokopio University of Athens, spring semesters 2013–2016 and 2017–2020.
- "Data Analysis – SPSS": teaching assistant for the Environmental Geoinformatics project, Graduate Knowledge Update Programme, Department of Geography, Harokopio University of Athens, May 2015.

- "Quantitative Methods in Demography": teaching assistant for practical classes using R, MSc in Applied Statistics, Department of Statistics and Insurance Science, University of Piraeus, winter semester 2013–2014.
- Website technical support: organisation and administration of the Department of Geography website using Joomla, Harokopio University of Athens, academic year 2013–2014.
- ATN Construction: employment at a technical/construction company, June–November 2012.
- NIKA Tutoring Centre: taught ECDL computer skills courses, 2008–2010.
- 2007 and 2008: Mathematics teacher for students in Gymnasium (Grades 7–9) at a private tutoring and computer training centre in Athens, through the University of Ioannina's EPEAEK vocational training programme during the summer periods.

PUBLICATIONS IN INTERNATIONAL AND GREEK SCIENTIFIC JOURNALS AND BOOKS

- Koutsostathis, E., Psaroulaki, A., Demiris, N., Chochlakis, D., Kalogeropoulos, K., Andreopoulos, P., & Tsatsaris, A. (2026). Legionella surveillance in Crete, Greece: Spatial analysis and implications for public health management. In Health Geography (pp. 175–186). Elsevier.
- Synani, K., Andreopoulos, P., Kalogeropoulos, K., Abeliotis, K., & Lasaridi, K. (2025). A Statistical Comparative Household Food Waste Generation Analysis. In C. H. Skiadas & C. Skiadas (Eds.), Quantitative Methods and Data Analysis in Applied Demography – Volume 2. The Springer Series on Demographic Methods and Population Analysis, vol. 58. Springer, Cham. https://doi.org/10.1007/978-3-031-82279-7_21
- Kalogeropoulos, K., Fragkopoulos, D., Andreopoulos, P., & Tragaki, A. (2024). Shifting sands: Examining and mapping the population structure of Greece through the last three censuses. Economies, 12(11), 294. https://doi.org/10.3390/economies12110294
- Andreopoulos, P., Kalogeropoulos, K., & Tragaki, A. (2023). Analysis and mapping of mortality data using probability distributions in Greece at the turn of the millennium. In V. Kotzamanis (Ed.), Demographic Challenges: Contemporary Research Approaches and Documentation (pp. 115–127). ISBN 978-960-9439-91-6.
- Kalogeropoulos, K., Andreopoulos, P., Tsatsaris, A., & Chalkias, C. (2023). Historical Geography, Geodemography and Mapping of Population Censuses in Greece. In V. Kotzamanis (Ed.), Demographic Challenges: Contemporary Research Approaches and Documentation (pp. 69–84). ISBN 978-960-9439-91-6.
- Andreopoulos, P., Bersimis, F. G., Kalogeropoulos, K., & Tragaki, A. (2023). Recent Changes in Human Mortality: The Case Study of Greece. In C. H. Skiadas & C. Skiadas (Eds.), Quantitative Demography and Health Estimates. The Springer Series on Demographic Methods and Population Analysis, vol. 55. Springer. https://doi.org/10.1007/978-3-031-28697-1_17
- Andreopoulos, P., Bersimis, F. G., & Tragaki, A. (2022). A Different Approach to Current Developments in the Twenty-First Century – Grouping European Countries in Terms of Mortality. In C. H. Skiadas & C. Skiadas (Eds.), Quantitative Methods in Demography. The Springer Series on Demographic Methods and Population Analysis, vol. 52. Springer, Cham. https://doi.org/10.1007/978-3-030-93005-9_24
- Andreopoulos, P., & Meleas, I. (February 2022). Authoring Chapter 4, "Economic Data of Small and Medium-Sized Retail Enterprises: INEMY's Sample Survey for 2020." Annual Report on Greek Commerce 2021. INEMY, Athens, Greece.
- Andreopoulos, P., Kalogeropoulos, K., Tragaki, A., & Stathopoulos, N. (2021). Could Historical Mortality Data Predict Mortality Due to Unexpected Events? ISPRS International Journal of Geo-Information, 10(5), 283.
- Andreopoulos, P., & Tragaki, A. (2020). On Demographic Approach of the BGGM Distribution Parameters on Italy and Sweden. In C. Skiadas & C. Skiadas (Eds.), Demography of Population Health, Aging and Health Expenditures. The Springer Series on Demographic Methods and Population Analysis, vol. 50. Springer, Cham. https://doi.org/10.1007/978-3-030-44695-6_12
- Andreopoulos, P., Tragaki, A., Antonopoulos, G., & Bersimis, F. G. (2020). Properties and Dynamics of the Beta Gompertz Generalized Makeham Distribution. In C. Skiadas & C. Skiadas (Eds.), Demography of Population Health, Aging and Health Expenditures. The Springer Series on Demographic Methods and Population Analysis, vol. 50. Springer, Cham. https://doi.org/10.1007/978-3-030-44695-6_18
- Andreopoulos, P., Polykretis, C., & Tragaki, A. (2020). Assessment and Mapping of Spatio-Temporal Variations in Human Mortality-Related Parameters at European Scale. ISPRS International Journal of Geo-Information, 9(9), 547.
- Andreopoulos, P., Bersimis, F., & Kamperis, N. (December 2020). Approaching Mortality in Greece through Probability Distributions. Academy of Athens, KEEK Yearbook, issue 12, Athens, Greece.
- Polykretis, C., Kalogeropoulos, K., Andreopoulos, P., Faka, A., Tsatsaris, A., & Chalkias, C. (2019). Comparison of Statistical Analysis Models for Susceptibility Assessment of Earthquake-Triggered Landslides: A Case Study from the 2015 Earthquake on Lefkada Island. Geosciences, 9(8), 350.
- Andreopoulos, P., Bersimis, G. F., Tragaki, A., & Rovolis, A. (2019). Mortality modeling using probability distributions: Application in Greek mortality data. Communications in Statistics – Theory and Methods, 48(1), 127–140.

PUBLICATIONS IN PEER-REVIEWED CONFERENCE PROCEEDINGS

1. Kalogeropoulos, K., Andreopoulos, P., Fragkopoulos, D., & Tragaki, A. (2024). Study and mapping of Greece's population structure over the past twenty years. 23rd Scientific Conference of the Association of Greek Regionalists, Heraklion, Crete, Greece.
2. Synani, K., Kalogeropoulos, K., Andreopoulos, P., Abeliotis, K., & Lasaridi, K. (2023). Spatial autocorrelation analysis of food waste in the EU. 10th International Conference on Sustainable Solid Waste Management, Chania, Greece.
3. Andreopoulos, P., Bersimis, F., & Tragaki, A. (June 2021). A different approach to current developments in the 21st century – grouping European countries in terms of mortality. 19th Applied Stochastic Models and Data Analysis International Society and Demographics Workshop, Athens, Greece. ISTE-Wiley book publications from recent ASMDA and SMTDA conferences.
4. Synani, K., Andreopoulos, P., Abeliotis, K., & Lasaridi, K. (2021). Compositional analysis of household avoidable food waste in four European countries. RETASTE Conference, vol. 1, RETASTE-PLW-163, Athens, Greece.
5. Andreopoulos, P., Tragaki, A., Antonopoulos, G., & Bersimis, F. (2019). Mathematical properties of the Beta Gompertz Generalized Makeham distribution. 36th Panhellenic Conference on Mathematics Education, Hellenic Mathematical Society, Larissa, Greece.
6. Kalogeropoulos, K., Andreopoulos, P., Tragaki, A., et al. (November 2019). The historical geography of Greece's population using geodemographic indicators. 12th International Conference of the Hellenic Geographical Society, Athens, Greece. Proceedings Series, ISBN 978-960-606-047-2.
7. Andreopoulos, P., Tragaki, A., & Bersimis, F. (June 2019). On the demographic approach to the BGGM distribution parameters. 18th Applied Stochastic Models and Data Analysis International Society and Demographics Workshop, Florence, Italy.
8. Andreopoulos, P., Tragaki, A., & Moutti, M. (December 2018). The dynamics of a new mathematical mortality model in contemporary living conditions. 35th Panhellenic Conference on Mathematics Education, Hellenic Mathematical Society, Athens, Greece.
9. Andreopoulos, P., Tragaki, A., & Bersimis, F. (June 2018). New distributions for mortality modelling: A different approach. 5th Stochastic Modeling Techniques and Data Analysis International Conference with Demographics Workshop, Chania, Crete, Greece.
10. Avraam, D., Bersimis, F., & Andreopoulos, P. (June 2018). A proposed procedure for forecasting future mortality trends. 5th Stochastic Modeling Techniques and Data Analysis International Conference with Demographics Workshop, Chania, Crete, Greece.
11. Andreopoulos, P., Bersimis, G. F., Dimitriou, X., & Zachos, G. (December 2017). Modelling mortality rates using probability distributions: Impact on hospital costs. 16th Annual Conference of the Hellenic Finance and Accounting Association, Athens, Greece.
12. Polykretis, C., Bersimis, F., & Andreopoulos, P. (November 2017). Applying mathematical methods to assess susceptibility to landslides triggered by the 2015 Lefkada earthquake. 34th Panhellenic Conference on Mathematics Education, Nikiana, Lefkada, Greece.
13. Andreopoulos, P., Bersimis, F., & Tragaki, A. (October 2017). Comparison of the new B.ANBE and ANBE.G mortality models using Greek data for each year from 2001 to 2013. 1st Panhellenic Demography Conference, Komotini, Greece.
14. Avraam, D., Andreopoulos, P., & Bersimis, F. (October 2017). A simple procedure to forecast mortality trends: Evidence from a backtesting analysis applied to Greek death rates for 1981–2010. 1st Panhellenic Demography Conference, Komotini, Greece.
15. Andreopoulos, P., & Bersimis, F. (November 2016). Developing probability distributions from mathematical mortality models. 33rd Panhellenic Conference on Mathematics Education, Hellenic Mathematical Society, Chania, Crete, Greece.
16. Andreopoulos, P., Bersimis, F., & Tragaki, A. (May 2016). Mathematical modelling of mortality data using a (new) probability distribution (Technical Report). 1st Panhellenic Conference of Recent MSc and PhD Graduates in Mathematics, University of Ioannina, Greece, Special Volume, pp. 3–14. https://doi.org/10.13140/RG.2.2.26639.79527
17. Andreopoulos, P., & Bersimis, F. (November 2015). Mortality modelling using probability distributions. 1st International Conference of Science in Technology, Athens, Greece.
18. Andreopoulos, P., & Bersimis, F. (October 2015). Mathematical modelling of mortality data using probability distributions. 32nd Panhellenic Conference on Mathematics Education, Hellenic Mathematical Society, Kastoria, Greece.
19. Andreopoulos, P., & Bersimis, F. (May 2015). Gamma and Gamma-Gompertz smoothing regression models of mortality indices. 8th Conference of the Eastern Mediterranean Region of the International Biometric Society, Cappadocia–Nevşehir, Turkey.
20. Andreopoulos, P., Bersimis, F., & Tsimbos, K. (2014). Smoothing models for demographic mortality indicators. 27th Panhellenic Statistics Conference, Thessaloniki, Greece.
21. Andreopoulos, P. (2013). Spatial Hidden Markov Poisson Models, with an Application to Disease Mapping. 1st Conference on Spatial Analysis, Athens, Greece.

22. Andreopoulos, P. (2011). Mathematical modelling: Applications in science, technology and education. 28th Panhellenic Conference of the Hellenic Mathematical Society, Athens, Greece.

CONFERENCE PRESENTATIONS

23. 40th Panhellenic Conference on Mathematics Education, Hellenic Mathematical Society, Ioannina, Greece (November 2025): “Contemporary Mathematics and Its Connections with Other Disciplines.”
24. 10th International Conference on Sustainable Solid Waste Management, Chania, Crete, Greece (June 2023): “Spatial autocorrelation analysis of food waste in the EU.”
25. 20th Applied Stochastic Models and Data Analysis International Society and Demographics Workshop, Heraklion, Crete, Greece (June 2023): “Comparative statistical analysis of food waste.”
26. 7th Stochastic Modeling Techniques and Data Analysis International Conference with Demographics Workshop, Athens, Greece (June 2022): “Recent changes in human mortality: The case study of Greece.”
27. Forum “Greece 2040,” Zappeion, Athens (October 2021), organised as part of the Greece 2021 Committee initiative: “The White Paper on Retail Trade 2040: Reflections and Estimates on the Transformation of Retail Trade.”
28. 19th Applied Stochastic Models and Data Analysis International Society and Demographics Workshop, virtual, Athens, Greece (June 2021): “A different approach to current developments in the 21st century – grouping European countries in terms of mortality.”
29. 36th Panhellenic Conference on Mathematics Education, Hellenic Mathematical Society, Larissa, Greece (November 2019): “Mathematical properties of the Beta Gompertz Generalized Makeham distribution.”
30. 18th Applied Stochastic Models and Data Analysis International Society and Demographics Workshop, Florence, Italy (June 2019): “On the demographic approach to the BGGM distribution parameters.”
31. 35th Panhellenic Conference on Mathematics Education, Hellenic Mathematical Society, Athens, Greece (December 2018): “The dynamics of a new mathematical mortality model in contemporary living conditions.”
32. 5th Stochastic Modeling Techniques and Data Analysis International Conference with Demographics Workshop, Chania, Crete, Greece (June 2018): “New distributions for mortality modelling: A different approach.”
33. 16th Annual Conference of the Hellenic Finance and Accounting Association, Athens, Greece (December 2017): “Modelling mortality rates using probability distributions: Impact on hospital costs.”
34. 34th Panhellenic Conference on Mathematics Education, Hellenic Mathematical Society, Nikiana, Lefkada, Greece (November 2017): “Applying mathematical methods to assess susceptibility to landslides triggered by the 2015 Lefkada earthquake.”
35. 1st Panhellenic Demography Conference, Komotini, Greece (October 2017): “Comparison of the new B.ANBE and ANBE.G mortality models using Greek data for each year from 2001 to 2013.”
36. 1st Panhellenic Demography Conference, Komotini, Greece (October 2017): “A simple procedure to forecast mortality trends: Evidence from a backtesting analysis applied to Greek death rates for 1981–2010.”
37. 33rd Panhellenic Conference on Mathematics Education, Hellenic Mathematical Society, Chania, Crete, Greece (November 2016): “Developing probability distributions from mathematical mortality models.”
38. 4th Stochastic Modeling Techniques and Data Analysis International Conference with Demographics Workshop, Valletta, Malta (June 2016): “Mortality modelling using probability distributions: Application to Greek mortality data.”
39. 1st Panhellenic Conference of Recent MSc and PhD Graduates in Mathematics, Department of Mathematics, University of Ioannina, Greece (May 2016): “Mathematical modelling of mortality data using a (new) probability distribution.”
40. 1st International Conference of Science in Technology, Athens, Greece (November 2015): “Mortality modelling using probability distributions.”
41. 32nd Panhellenic Conference on Mathematics Education, Hellenic Mathematical Society, Kastoria, Greece (October 2015): “Mathematical modelling of mortality data using probability distributions.”
42. 8th Conference of the Eastern Mediterranean Region of the International Biometric Society, Cappadocia–Nevşehir, Turkey (May 2015): “Gamma and Gamma-Gompertz smoothing regression models of mortality indices.”
43. 27th Panhellenic Statistics Conference, Thessaloniki, Greece (2014): “Smoothing models for demographic mortality indicators.”
44. 1st Conference on Spatial Analysis, Athens, Greece (2013): “Spatial Hidden Markov Poisson Models, with an Application to Disease Mapping.”

SEMINARS, TRAINING AND PARTICIPATION

- “The e-Class Platform Is Changing!” online seminar and e-class user certification, 5 November 2025.
- Experiential seminar/workshop on “Educational Robotics,” 23–25 October 2015.
- Teaching assistance for an SPSS seminar, 15–18 April 2015.
- 28th Panhellenic Statistics Conference, Hellenic Statistical Institute: “Spatial Statistics and Applications of Statistics in Genetics and Computer Science,” Harokopio University of Athens, Greece.

- Seminars and lectures in Statistics.
- General-interest seminars focused on people, employees and students (2010, 2011): deaf and hard-of-hearing students; dyslexia and learning difficulties; managing workplace pressure and stress.
- 1st Panhellenic Conference on Promoting Educational Innovation: “Scenarios and Methodologies from the Educational Robotics Laboratory of the Technological Educational Institute of Thessaly,” University of Thessaly and TEI of Thessaly, Larissa, Greece.

ACADEMIC ACTIVITIES

Membership of Scientific Organisations

- Member of the Hellenic Mathematical Society since 2014.
- Member of the editorial team of the Hellenic Mathematical Society’s mathematics journal, Euclid B, since 2016.
- Member of the Hellenic Statistical Institute since 2014.

Peer Reviewer

- ISPRS International Journal of Geo-Information (MDPI)
- Applied Sciences (MDPI)
- Forests (MDPI)
- Sustainability (MDPI)

RESEARCH PROJECTS

- Statistical analyst in the project “Evaluation of Greek Non-Governmental Organisations (NGOs),” funded by the European Social Fund and national resources (EPEAEK, THALES); member of the primary research team. Scientific coordinator: A. Chouliaras, 2012–2015.
- External collaborator and statistical data analyst for the project “Presentation of a New Approach to Mortality and Its Application to Data from Selected European Countries,” Special Account for Research Funds (ELKE), Harokopio University of Athens. Scientific coordinator: Alexandra Tragaki, Professor, Department of Geography, 2019–2020.
- External collaborator and statistical data analyst on the project “National Contribution by the General Secretariat for Research and Technology for 2018 to the European Programme: Development and Demonstration of Waste Electrical and Electronic Equipment (WEEE),” project code 504, ELKE, Harokopio University of Athens. Scientific coordinator: Katia Lasaridi, Professor and Chair of the Department of Geography, 2020–2021.
- Statistical Analyst / Research Associate at ESEE for Sub-project 1, “Multiplier Effects of Tourism Activity on Trade,” within the project of the same name (MIS 5044982), implemented through the 2014–2020 Operational Programme “Competitiveness, Entrepreneurship and Innovation” (NSRF), co-funded by the European Union (European Social Fund) and national resources, 2021–2022.

LANGUAGES

English: Good command; First Certificate in English (Cambridge).
French: Basic-level qualifications; DELF A1 and A2.

COMPUTER SKILLS

- Advanced proficiency in mathematical and statistical software: LINDO, C++, Java, SPSS, MATLAB, Minitab, Stata, R and SAS.
- ECDL Core certification: Word, Excel, PowerPoint, Internet/Outlook Express, Windows, Access and basic computer concepts.
- ECDL Expert certification (advanced IT proficiency; certified teaching).
- Structural Equation Modelling (SEM) using AMOS (IBM SPSS).
- Website content management systems: Joomla.
- Geographic Information Systems (GIS).
- Touch typing.