

Curriculum Vitae

Dimitris Karlis

15/1/2025

NAME Dimitris
SURNAME Karlis
e-mail addresses karlis@aub.gr
Phone +30 210 8203 920
Web page www.stat-athens.aub.gr/~karlis



Contents

1.	Academic Positions	2
2.	Education	2
3.	Scholarships	2
4.	Research Projects	2
5.	Consulting Projects	3
6.	Research Papers	3
7.	Papers in Edited Volumes	9
8.	Conferences Proceedings	10
9.	Other Conferences (With presentation by myself)	12
10.	Business Congresses	21
11.	Citations	21
12.	Invited Talks	21
13.	Lecture Notes	23
14.	Books (in Greek).....	23
15.	Refereeing	23
16.	Memberships.....	23
17.	Organizing Committees	23
18.	Phd Committees (as external)	24
19.	Editorships	24
20.	Awards	25
21.	Invited Courses given.....	25
22.	Administration Duties	25
23.	Theses supervised	25

1. Academic Positions

December 2015- today	Professor Dept of Statistics, Athens University and Economic
November 2011 – December 2015	Associate Professor Dept of Statistics, Athens University and Economic
November 2001 – October 2011	Assistant Professor, Dept of Statistics, Athens University and Economic
September 2005 – today	Greek Open University, Lecturer for Quantitative Methods
January 2003 – February 2003	Visitor in the Dept of Business Informatics, Limburg Universitair Centrum; Belgium
2005- today	Tutor, Hellenic Open University, Program in Business Administration DEO13 2005-2021,2023 MBA60 2022

2. Education

1988 – 1992	BSc in Statistics, Athens University of Economics and Business (AUEB) Department of Statistics (8.5/10).
1994 -1998	PhD in Applied Statistics and Computational Statistics (supported from the State Scholarships Foundation of Greece). Title: “ <i>Estimation and Testing Problems in Poisson Mixtures</i> ” Supervisor: Prof. Evdokia Xekalaki External Examiners: Sir David Cox Prof. Bruce Lindsay

3. Scholarships

1993-1998	Scholarship from the National Scholarship Foundation for doctoral dissertation
-----------	--

4. Research Projects

March 1997 – September 1997	Centre of the Renewal Energy Sources: Statistical Analysis of fatigue loadings of a wind turbine
September 1997-February 1998	Formation of the Educational Program of the National Statistical Office of Greece
January 1998- November 1998	Integration of Statistical Software in Eurostat’s Data Bases (SUP-COM 17)

January 2000 -	IST-99-1-1A – Proposal No 12134 : Extended Statistical Information System
October 2002 – February 2003	VL-CATS Virtual Library for Computer Assisted Training of Statistics. Preparation of ‘Data Analysis’ course
January 2004 – May 2005	Digital Era Statistical Indicators IST–2000–31083
August 2006 -- September 2007	Building the Intrastat system in Romania- Team Leader
November 2010- August 2012	Analysis of the surveillance and monitoring data on zoonotic agents in EU
January 2015 – March 2016	Integration of Social Survey in a modular system. (Project Funded by Eurostat)
September 2018 -April 2022	Real Estate Analytics, project funded by FP7
September 2007 - Today	Clinical Trials designs expert – Frontier Science Foundation Hellas

5. Consulting Projects

Groupama 2015	Models for pricing car insurance
Interamerican 2019	Consulting about the current models of the company
Cerved Group SA 2015- today	Real estate models and Risk management
Frontier Science Foundation Hellas 2007-today	Clinical trials experts – Designs and Analysis of clinical trials
Wemetrix 2020	Financial Software evaluation project
OTE 2016	Building churn models for the mobile sector

6. Research Papers

Papers published in peer-reviewed journals

1. Karlis D., Xekalaki E. (1999) On testing for the number of components in finite Poisson mixtures. *Annals of the Institute of Statistical Mathematics*, **51**, 149-161.
2. Karlis D., Xekalaki E. (1998) Minimum Hellinger distance estimation for finite Poisson mixtures. *Computational Statistics and Data Analysis*, **29**, 81-103.
3. Karlis D., Xekalaki E. (1999). Improving the EM algorithm for mixtures. *Statistics and Computing*, **9**, 303-307.
4. Diamantidis N., Karlis D., Giakoumakis M. (2000) Unsupervised stratification of cross-validation for accuracy estimation. *Artificial Intelligence*, **116**, 1-16.
5. Karlis D., Xekalaki E. (2000) A Simulation Comparison of Several Tests for the Poisson Distribution. *Journal of the Royal Statistical Society Series D, The Statistician*, **49**, 355-382

6. Karlis D. and Ntzoufras J. (2000). On Modelling Soccer Data. *Student*, 3, 229-245.
7. Karlis D., Xekalaki E. (2001) Robust Testing And Diagnostics For Finite Poisson Mixtures *Journal of Statistical Planning and Inference*, 93, 93-115
8. Dellaportas P., Karlis D. (2001) A simulation approach to hierarchical models. *International Statistical Review* 69, 63-79.
9. Karlis, D. (2002) A general EM approach for maximum likelihood estimation in Mixed Poisson Regression Models. *Statistical Modelling : An International Journal*, 1, 305 – 318.
10. Karlis D., (2002). An EM Type Algorithm for ML estimation for the Normal – Inverse Gaussian Distribution. *Statistics and Probability Letters* 57, 43-52
11. Karlis D., Xekalaki E. (2003) Choosing initial values for the EM algorithm for finite mixtures *Computational Statistics and Data Analysis*, 41, 577-590
12. Karlis, D. Kostaki, A. (2002) Bootstrap Techniques for Mortality Models *Biometrical Journal*, 44, 696-712.
13. Karlis D. (2003) An EM Algorithm for Multivariate Poisson Distribution and Related Models. *Journal of Applied Statistics*, 30, 63-77.
14. Karlis, D., Saporta, G. and Spinakis A. (2003) A Simple Rule for the Selection of Principal Components. *Communications in Statistics- Theory and Methods*, 32, 643 –666.
15. Karlis D., Xekalaki E. (2003) A Zero frequency alternative method to the moment method of estimation in Finite Poisson Mixtures, *Journal of Statistical Computation and Simulation*, 73, 409-427.
16. Iliopoulos, G. and Karlis, D. (2003) Simulation from the Bessel distribution with applications. *Journal of Statistical Computation and Simulation*, 73, 491-506
17. Karlis, D. (2003) Maximum Likelihood Estimation for Multivariate Shock Models. *Annals of the Institute of Statistical Mathematics*, 55, , 817-830
18. Karlis, D and Ntzoufras, J. (2003) Analysis of Sports Data Using Bivariate Poisson Models. *The Statistician*, 52, 381-393
19. Tsiamyrtzis, P. and Karlis, D. (2004) Strategies for efficient computation of multivariate probabilities. *Communications in Statistics – Simulation and Computation*, 33, 271 –293.
20. Brijs, T., Karlis, D. , G. Swinnen, K. Vanhoof and G. Wets and Manchanda, P. (2004) A Multivariate Poisson Mixture for Marketing Applications . *Statistica Neerlandica*, 58, 322-348.
21. Frangos, N. and Karlis, D. (2004) Modelling Losses using a Exponential-Inverse Gaussian Distribution. *Insurance: Mathematics and Economics*, 35, 53-67
22. Karlis, D. and Lillestol, J. (2004) Bayesian estimation for the NIG distribution *Applied Stochastic Models in Business and Industry*, 20,323-338.
23. Karlis, D. and Xekalaki, E. (2005) Mixed Poisson Distributions. *International Statistical Review*, 73, 35-58
24. Karlis, D. (2005) An EM algorithm for mixed Poisson distributions. *ASTIN Bulletin*, 35, 3-24
25. Ntzoufras, I., Katsis, A. and Karlis, D. (2005) Bayesian Assessment of the Distribution of Insurance Claim Counts Using Reversible Jump MCMC. *North American Actuarial Journal*, 9, 90-108
26. Karlis, D. and Meligkotsidou, L. (2005) Multivariate Poisson Regression with Covariance Structure. *Statistics and Computing*, 15, 255-265
27. Karlis D. and Ntzoufras J. (2005). Bivariate Poisson and Diagonal Inflated Bivariate Poisson Regression Models R. *Journal of statistical Software*, vol 14, issue 10.

28. Iliopoulos, G., Karlis, D. and Ntzoufras, J. (2005). Bayesian estimation in Kibble's bivariate gamma distribution. *Canadian Journal of Statistics*, 33, 571-589
29. Karlis, D. and Ntzoufras, I. (2006) Bayesian analysis of the differences of count data. *Statistics in Medicine* 25, 1885-1905
30. Geurts, K., Wets, G., Brijs, T, Van Hoof, K. , Karlis, D. (2006) Ranking And Selecting Dangerous Crash Locations: Correcting For The Number Of Passengers And Bayesian Ranking Plots. *Journal of Safety Research*, 37, 83-91
31. Brijs, T., Karlis, D., van den Bossche and Wets, G. (2006) A Model for Identifying and Ranking Dangerous Accident Locations: A Case-Study in Flanders. *Statistica Neerlandica*, 60, 457-476
32. Karlis, D. and Meligkotsidou, L. (2007) Finite multivariate Poisson mixtures with applications. *Journal of statistical Planning and Inference*, 137, 1942-1960
33. Karlis, D. and Patilea, V. (2007) Confidence Intervals of the hazard function for discrete distributions using mixtures. *Computational statistics and Data Analysis*, 51, 5388-5401
34. Nikoloulopoulos, AK, and Karlis, D. (2008) On modeling count data: a comparison of some well known discrete distributions *Journal of Statistical Computation and Simulation*, 78, 437-457
35. Karlis, D., Rahmouni, M. (2007) Analysis of Defaulters' Behavior Using Poisson-Mixture Approach. *IMA Journal of Mathematics in Management*, 18, 297-311
36. Brijs, T., Karlis, D, Vad der Bosche, P and Wets, G. (2007). Bayesian Ranking of accident sites *Journal of the Royal statistical Society, Series A* 170, 1001-1017
37. Nikoloulopoulos, A.K and Karlis, D. (2008) Fitting copulas to bivariate earthquake data: the seismic gap hypothesis revisited. *Environmetrics*, 2008; 19: 251–269
38. Karlis, D. And Tsiamyrtzis, P. (2008). Exact Bayesian Inference for bivariate Poisson models *Statistics and Computing*, 18, 27-40
39. Karlis, D. and Patilea, V. (2008). Bootstrap confidence intervals intervals in mixtures of discrete distributions. *Journal of Statistical Planning and Inference*, 138, 2313-2329
40. Pavlopoulos, H. and Karlis, D. (2008) INAR(1) Modelling of Overdispersed Count Series with an Environmental Application. *Environmetrics*, 19, 369-393
41. Karlis, D., Vasdekis, VSG, Banti, M. (2009) Heteroscedastic Semiparametric models for Domestic Water Consumption, *Ecological and Environmental Statistics*, 16, 355-267
42. Nikoloulopoulos, A.K. and Karlis, D. (2008) Copula model evaluation based on parametric bootstrap *Computational Statistics and Data Analysis*, 52, 3342-3353
43. Karlis, D. and Santourian, A. (2009) Model Based Clustering with non-elliptically contoured distributions. *Statistics and Computing*, 19, 73-83
44. Brijs, T., Karlis, D. and Weets, G. (2008) An Integer Autoregressive Model to Study the Effect of Weather Conditions on Daily Car Accident Counts *Accident analysis and Prevention*, 40, 1180-1190
45. Karlis, D. and Ntzoufras, I. (2008) Bayesian modelling of football outcomes: Using the Skellam's distribution for the goal difference. *IMA Journal of Mathematics in Management*, 20, 133-145
46. Nikoloulopoulos, A.K. and Karlis, D. (2008). Multivariate logit copula model with an application to dental data. *Statistics in Medicine*, 27, 6393-406
47. Karlis, D. (2008) A note on the estimation of the Exponential Poisson distribution, a nested EM algorithm. *Computational Statistics and Data Analysis*, 53, 894-899

48. Nikoloulopoulos, A.K. and Karlis, D. (2009) Finite normal mixture copula for modeling multivariate discrete data. *Journal of Statistical Planning and Inference*, 139, 3878-3890
49. Nikoloulopoulos, A.K. and Karlis, D. (2010). Regression in a copula model for bivariate count data. *Journal of Applied Statistics*, 37, 1555-1568
50. K. Fragiadakis, D. Karlis and S. G. Meintanis (2009) Tests of Fit for Normal Inverse Gaussian Distributions. *Statistical Methodology*, 6, 553-564
51. Orfanogiannaki, K., Karlis, D. and Papadopoulos, J. (2009) Identifying seismicity patterns using Poisson Hidden Markov Models *Pure and Applied Geophysics*, 167, 919-931
52. Nikoloulopoulos, A.K. and Karlis, D. (2010). Modelling multivariate count data using copulas *Communications in statistics, Simulation and Computation*, 39, 172-187
53. Andersson J. and Karlis D. (2009) Treating missing values in INAR model with an application to syndromic surveillance *Journal of Time Series Analysis*, 31, 12-19
54. Pedeli, X. and Karlis, D. (2011) A bivariate Poisson INAR(1) model with application. *Statistical Modelling*, 11, 325-349
55. Karlis, D. and Ntzoufras, I. (2011) Robust fitting for football prediction models. *IMA Journal of Mathematics in Management*, 22, 171-182
56. Ng, C.T., Joe, H., Karlis, D. and Liu, J (2011) Composite Likelihood Methods for Time Series Models With A Latent Autoregressive Process *Statistica Sinica* 21, 279-305
57. Bermudez, L. and Karlis, D. (2011) Bayesian multivariate Poisson models for assuming dependence in a ratemaking procedure. *Insurance: Mathematics and Economics*, 48, 226-236
58. Pedeli, X. and Karlis, D. (2012). On estimation for the bivariate Poisson INAR process *Communications in Statistics, Simulation and Computation*, 42,3, 514-533
59. Perakis, K, Karlis, D, Cools, M., Jansen, D., Van Hoof, K. and Wets, G. (2011) A Bayesian Approach for Modeling Origin-Destination Matrices. *Transportation Research, Part A*, Vol 46, 200-212
60. Wikström, P-O.H., Tseloni, A. and Karlis, D. (2011) Do people comply with the law because they fear getting caught? *European Journal of Criminology*, 8, 401-420
61. Bermudez, L. and Karlis, D. (2012) A finite mixture of bivariate Poisson regression models with an application to insurance ratemaking. *Computational Statistics and Data Analysis*, 56 , 3988-3999
62. Fragiadakis, K., Karlis, d. and Meintanis, S. (2013) Inference procedures for the variance gamma model and applications. *Journal of Statistical Computation and Simulation*, 83, 555-567
63. Pedeli, X. and Karlis, D. (2013) On composite likelihood estimation of a multivariate INAR(1) model. *Journal of Time Series Analysis*, 34, 206-220
64. Arakelian, V. and Karlis, D. (2014) Clustering dependencies via mixtures of . *Communications in Statistics, Simulation and Computation*. 43, 1644-1661
65. Karlis, D. and Pedeli, X. (2013) Flexible bivariate INAR(1) model using copulas. *Communications in Statistics, Theory and Methods*, 42, 723-740
66. Ghitany, M., Karlis, D., Al-Mutiari, D. and Al-Awhadi, F. (2013) Expectation-Maximization algorithm for multivariate mixed Poisson regression models and its application *Applied Mathematical Sciences*, 6. 6843 – 6856
67. Pouloupoulou, S., Karlis D and Dafni, U., Yiannoutsos, C. (2014) Phase II Design with Sequential Testing of Hypotheses within Each Stage. *Journal of Biopharmaceutical Statistics* 24(4), 768-784

68. Pedeli, X. and Karlis, D. (2013) Some properties of multivariate INAR(1) processes *Computational Statistics and Data Analysis*, 67, 213-225
69. Andersson, J. and Karlis, D. (2014) A Parametric Time Series Model with Covariates for Integers in *Z. Statistical Modeling Journal*, 14 (2), pp. 135-156
70. Perrakis, K., Karlis, D, Cools, M. and Janssen, D. (2015) Bayesian inference for transportation origin-destination matrices: the Poisson-inverse Gaussian and other Poisson mixtures *Journal of the Royal Statistical Society, Series A*, 178, 271-296
71. Orfanogiannaki, K., Karlis, D. and Papadopoulos, G. (2014) Identification of temporal patterns in the seismicity of Sumatra using Poisson Hidden Markov Models. *Research in Geophysics* volume 4:4969
72. Meintanis, S.G. and Karlis, D. (2014) Validation Tests for the Innovation Distribution in INAR Time Series Models *Computational Statistics* 29 (5), 1221-1241
73. O'Hagan, A., Murphy, B., Gormley, C., McNicholas, P. and Karlis, D. (2016) Clustering with the Multivariate Normal Inverse Gaussian Distribution *Computational Statistics and Data Analysis*, 93, 18-30
74. Dafni, U., Karlis, D., Smit, E., Peters, S. (2014) Second line treatment for EGFR wild-type advanced NSCLC: The Jury is Still out (Letter), *Lung Cancer*, 84(3), 314-315
75. Chesneau, C., Kachour, M. and Karlis, D. (2015) On some distributions arising from a generalized trivariate reduction scheme. *Statistical Methodology*, 25, 36-50
76. Kosmidis, I. and Karlis, D. (2016) Model Based clustering using copulas. *Statistics and Computing* 26, 1079-1099
77. Bermudez, L. and Karlis, D. (2017) A posteriori ratemaking using bivariate Poisson models. *Scandinavian Actuarial Journal*, (2), 148-158
78. Karlis, D., Papatla, P, Roy, S. (2016) Finite Mixtures of Censored Poisson Regression Models. *Statistica Neerlandica*, 70, 100-122
79. Sherene Loi, Urania Dafni, Dimitris Karlis, Varvara Polydoropoulou, Brandon M. Young, Scooter Willis, Bradley Long, Evandro de Azambuja, Christos Sotiriou, Giuseppe Viale, Josef Rüschoff, Martine J. Piccart, Mitch Dowsett, PhD13; Stefan Michiels, PhD14; Brian Leyland-Jones, (2016) Effects of Estrogen Receptor and Human Epidermal Growth Factor Receptor-2 Levels on the Efficacy of Trastuzumab A Secondary Analysis of the HERA Trial. *JAMA Oncology*, 2(8), 1040-1047
80. Orfanogiannaki, K. and Karlis, D. (2018) Multivariate Poisson Hidden Markov models with a case study of modelling seismicity. *Australian and New Zealand Journal of Statistics* 60, 301-322
81. Bermúdez, L., Karlis, D. and Santolino, M. (2017) A finite mixture of multiple discrete distributions for modelling heaped count data *Computational Statistics & Data Analysis*, 112, 14-23
82. D Karlis, G Tzougas, N Frangos (2018) Confidence intervals of the premiums of optimal bonus malus systems, *Scandinavian Actuarial Journal*, 129-144
83. Cherny, N. I., Dafni, U., Piccart, M., Latino, N. J., Douillard, J. Y., Bogaerts, J., ... & Zielinski, C. (2018). Reply to “ESMO-MCBS v1. 1: Statistical and Patient Relevant Shortcomings” by R. Emprechtinger et al. *Annals of Oncology*.
84. Alexandridis, A. and Karlis, D. and Papastamos, D. and Andritsos, D. (2019) Real Estate valuation and forecasting in non-homogeneous markets: A case study in Greece during the financial crisis. *Journal of the Operational Research Society*, 70, 1769-1783

85. Bermúdez, L., M. Guillén, Karlis, Δ. (2019) Allowing for time and cross dependence assumptions between claim counts in ratemaking models, *Insurance: Mathematics and Economics* **83**, 161-169
86. Bermúdez, L., Karlis, D. and Santolino, M. (2018) A discrete mixture regression for modeling the duration of non-hospitalization medical leave of motor accident victims. *Accident Analysis & Prevention* **121**, 157-165
87. Cherny, N. I., de Vries, E. G., Dafni, U., Garrett-Mayer, E., McKernin, S. E., Piccart, M., ... & Bogaerts, J. (2018). Comparative Assessment of Clinical Benefit Using the ESMO-Magnitude of Clinical Benefit Scale Version 1.1 and the ASCO Value Framework Net Health Benefit Score. *Journal of Clinical Oncology*, **37**(4), 336-349.
88. Willis, S., Polydoropoulou, V., Sun, Y., Young, B., Tsourti, Z., Karlis, D., ... & Györfy, B. (2018). Exploratory Analysis of Single-Gene Predictive Biomarkers in HERA DASL Cohort Reveals That C8A mRNA Expression Is Prognostic of Outcome and Predictive of Benefit of Trastuzumab. *JCO Precision Oncology*, **2**, 1-12.
89. Dafni, U., Michielin, O., Llesma, S. M., Tsourti, Z., Polydoropoulou, V., Karlis, D., ... & Kammula, U. S. (2019). Efficacy of adoptive therapy with tumor-infiltrating lymphocytes and recombinant interleukin-2 in advanced cutaneous melanoma: a systematic review and meta-analysis. *Annals of Oncology*, **30**, 1902-1913
90. Pedeli, X. and Karlis, D. (2020) An integer-valued time series model for multivariate surveillance. *Statistics in Medicine*, **39**(7):940-954
91. Bermúdez, L., Karlis, D and Morillo, I. (2020) Modelling Unobserved Heterogeneity in Claim Counts Using Finite Mixture Models *Risks* **8**(1), 10
92. Tzougas, G. and Karlis, D. (2020) An EM Algorithm for Fitting Mixed Exponential Regression Models with Varying Dispersion. *ASTIN Bulletin* **50** (2). 555 - 583
93. Roick, T., Karlis, D, and McNicholas, P. (2020) Clustering Discrete Valued time series. *Advances in Data Analysis and Classification*, **15**(1), 209-229
94. Bermudez, L, and Karlis, D. (2021) Multivariate INAR(1) regression models based on the Sarmanov distribution. *Mathematics* **9**(5), 505
95. Tsamtsakiri, P. and Karlis, D. (2022). On Bayesian model selection for INGARCH models via transdimensional Markov chain Monte Carlo methods. *Statistical Modelling (to appear)*
96. Chuttoo, A., Karlis, D., Mamode Khan, N. and Jowaheer, V. (2021) The Unilateral Spatial Autoregressive Process for the Regular Lattice 2-dimensional Spatial Discrete Data. *SORT-Statistics and Operations Research Transactions* **45**, 67-90
97. Karlis, D, Ntzoufras, I and Repousis, P. (2021) Mathematics Meet Sports. Editorial for the special issue in Mathematics in Sports. *IMA Journal of Management Mathematics* **32** (4), 381-383.
98. Markatou, M., Karlis, D., & Ding, Y. (2021). Distance-Based Statistical Inference. *Annual Review of Statistics and its Application*, **8**, 301-327
99. Otting, M. and Karlis, D (2022) Football tracking data: a copula-based hidden Markov model for classification of tactics in football. *Annals of Operational Research* (to appear) <https://doi.org/10.1007/s10479-022-04660-0>
100. Y Fang, D Karlis, S Subedi (2022) Infinite mixtures of multivariate normal-inverse Gaussian distributions for clustering of skewed data. *Journal of Classification* **39** (3), 510-552.

101. Bermudez, L. and Karlis, D. (2022) Copula-based bivariate finite mixture regression models with an application for insurance claim count data. *Test* 31, 1082–1099
102. Karlis, D. and Mamode Khan, N. (2023) Models for Integer Data, *Annual Review of Statistics and Its Application* 10:1
103. Karlis, D., Chutoo, A., Mamode Khan, N. and Jowaheer, V (2023) The Multilateral Spatial Integer-valued Process of order 1. *Statistica Neerlandica* 78, 4-24
104. Kontos, C. and Karlis, D. (2023) Football Analytics based on player tracking data using interpolation techniques for the prediction of missing observations. *Statistica Applicata* 35 (2)
105. G Mazo, D Karlis, A Rau (2023) A randomized pairwise likelihood method for complex statistical inferences. *Journal of the American Statistical Association*, 119 (547), 2317-2327
106. Karlis, D., Pedeli, X and Varin, C (2023) Observation Driven Exponential Smoothing for counts. *Stat* 12 (1), e642
107. Karlis, D. (2023). Proposer of the vote of thanks to Narayanan, Kosmidis and Dellaportas and contribution to the Discussion of ‘Flexible marked spatio-temporal point processes with applications to event sequences from association football’. *Journal of the Royal Statistical Society Series C: Applied Statistics*, 72(5), 1127-1128.
108. Karlis, D., Mamode Khan, N., & Sunecher, Y. (2024). The Negative Binomial INAR (1) Process under Different Thinning Processes: Can We Separate between the Different Models?. *Stats*, 7(3), 793-807
109. Chasiotis V. and Karlis, D. (2024) Subset selection for big data regression: an improved approach. *Journal of Data Science, Statistics, and Visualisation*, 4(3). <https://doi.org/10.52933/jdssv.v4i3.78>
110. Martín-Lluesma, S., Svane, I. M., Dafni, U., Vervita, K., Karlis, D., Dimopoulou, G., ... & Coukos, G. (2024). Efficacy of TIL Therapy in Advanced Cutaneous Melanoma in the Current Immuno-oncology Era: Updated Systematic Review and Meta-analysis. *Annals of Oncology*. 35(10), 860-872
111. Rouven Michels, R., Otting, M. and Karlis, D. (2024) Extending the Dixon and Coles model: an application to women's football data. *Journal of the Royal Statistical Society Series C, Applied Statistics* (to appear)
112. E. Malea, S. C. Boyatzis, D. Karlis, D. Palles, S. Boghosian, and S. Zervos, “The Complementary Use of Raman, ATR-FTIR Spectroscopy and Chemometrics for Investigating the Deterioration of Artificially Aged Parchment,” *Journal of Raman Spectroscopy* 55 (2024).
113. Chasiotis, V. and Karlis, D (2023) On the selection of optimal subdata for big data regression based on leverage scores. *Journal of Statistical Theory and Practice* (to appear)
114. Scrucca, L. and Karlis, D. (2024) A Model-Based Approach to Shot Charts Estimation in Basketball (*Computational Statistics*, to appear)

7. Papers in Edited Volumes

1. Karlis, D and Xekalaki, E. (2003). Mixtures everywhere. In *Stochastic Musings*, ed J. Panaretos, pp 78-95.

2. Brijs, K., Vanhoof, K., Brijs, T. and Karlis, D (2006) Using Fuzzy Set Theory to Assess Country-of-Origin Effects on the Formation of Product Attitude. In *Modelling Decisions in Artificial Intelligence*, Lecture Notes in Computer Science (Artificial Intelligence), vol 3558, eds Torra, Vicenç; Narukawa, Yasuo; Miyamoto, Sadaaki, pp 138-149, Springer-Verlag Berlin-Heidelberg.
3. Karlis, D. and Xekalaki, E. (2008) The Polygonal Distribution, In. *Advances in Mathematical and Statistical Modeling in Honor of Enrique Castillo Arnold, B. C., Balakrishnan, N, Minués, M and Sarabia, J. M. (eds)*, Birkhauser: Boston, 21-33
4. Karlis, D. (2016) Modelling multivariate times series for counts. In *Handbook of Discrete-Valued Time Series*, edited by Richard A. Davis, Scott H. Holan, Robert Lund, Nalini Ravishanker, CRC Press, ISBN 9781466577732,
5. Karlis, D. (2020) Mixtures of discrete distributions. In *Handbook of mixture Analysis*. pp 193-218 ISBN 9780367732066
6. Karlis, D. and Orfanogiannaki K. (2021) Markov Regression Models for Time Series of Earthquake Counts. In “Statistical Methods and Modeling of Seismogenesis”, edited by Nikolaos LIMNIOS, Eleftheria PAPANIMITRIOU and George TSAKLIDIS. ISBN: 978-1-789-45037-8
7. Karlis, D., Ntzoufras, I and Manasis, V. (2023) Uncertainty in competitive balance: a model-based approach, In, *Statistics Meets Sports: What To Learn From Sports Data*, eds Yves Dominici and Christophe Ley

8. Conferences Proceedings

1. Xekalaki E., Karlis D.(1995) Testing hypotheses in Poisson family distributions. *Proceedings of the 51th World conference of the International Statistical Institute*, pp 1301-1302, Beijing, China, August 1995
2. Xekalaki E., Karlis D., (1998) Conditions for zero values of the Likelihood Ratio Test when testing for a Poisson mixture, *Proceedings of the Applied Statistical Modeling Conference, New Orleans*, 396-403
3. Karlis D., Xekalaki E (1998) An improvement of the EM algorithm for finite Poisson mixtures. *Proceeding of HERCMA 98, Athens*, 596-604
4. Karlis D., Ntzoufras I. (1998) Statistical Modelling for Soccer Games. *Proceedings of HERCMA 98, Athens*, 541-548
5. Karlis, D. (2001) The Normal-Inverse Gaussian Distribution and its application to financial data. 14 th *Panhellenic Conference in Statistics, Skiathos, April, 2001*.
6. Karlis, D., Saporta, G., Spinakis, A. and Anastasiou, G. (2001) On a statistical package for non-expert users. *Proceedings of the ETK-NTTS 2001 Conference, Crete, 18-22 June 2001*, pp 903-905
7. Yiokari, N., Xekalaki, E. and Karlis, D. (2001). “On Some Discrete-Valued Time Series Models Based on Mixtures and Thinning”, *Proceedings of HERCMA 2001, Athens*, 872-877.
8. Karlis, D. and Xekalaki, E. (2001).Maximum Likelihood Estimation For Integer Valued Time Series Models with an Environmental Application. *Proceedings of HERCMA 2001, Athens*, 778-783 .
9. Karlis, D. (2002) Models based on the Normal-Inverse Gaussian distribution. *Proceedings of the 17th International Workshop on Statistical Modelling*, eds Stasinopoulos and Touloumi, pp 375-382

10. Karlis, D. and Ntzoufras, I. (2003) Bayesian and non-Bayesian analysis of soccer data using bivariate Poisson regression model. *Proceedings of the 16th Pan-Hellenic Conference in Statistics, Kavala*, pp 605-613
11. Karlis, D. and Meligkotsidou, L. (2003) Model Based Clustering for multivariate Count Data. *Proceedings of the 18th International Workshop on Statistical Modelling, Leuven, Belgium eds Lessaffre, Verbeke, Moolenbergs*, pp 375-382
12. Brijs T., Karlis D., Van den Bossche F. and Wets G. (2003). A Bayesian Model for Ranking Hazardous Sites. In: *Proceedings of the 11th Symposium Statistical Software*, organized by the Royal Dutch Academy of Sciences, November 6, Amsterdam, The Netherlands. Pp 55-72. ISBN:90-8084-16-1-7.
13. Ntzoufras, I., Katsis, A., and Karlis, D. (2003), A Bayesian Statistical modelling for the distribution of Insurance Counts. In T.E. Simos (ed). *Computational Methods in Sciences and Engineering, Proceedings of the International Conference 2003 (ICCMSE 2003)*, World Scientific Publishing Co. Pte. Ltd. Singapore: pp. 470-473.
14. Karlis, D. and Tsiamyrtzis, P.(2004) Exact Bayesian inference for bivariate Poisson data. *Proceedings of the 19th International Workshop on Statistical Modelling, Firenze, July 2004, eds Biggeri et al.*, pp 435-439. (ISBN 88 -8453-193-4)
15. Nikoloulopoulos, A.K. and Karlis, D. (2006) Modelling multivariate count data using copula functions. *COMPSTAT 2006 - Electronic Proceedings in Computational Statistics 17th Symposium Held in Rome, Italy, 2006*. Rizzi, Alfredo; Vichi, Maurizio (Eds.). ISBN: 3790817082.
16. Karlis, D. Sermaidis, G. and Brijs, T. (2007) Discrete valued time series models for examining weather effects in daily accident counts. *Proceedings of the 22th International Workshop on Statistical Modelling, Barcelona, July 2007, eds De Castillo et al.*, pp 368-373. (ISBN 978-84-690-5943-2)
17. Pouloupoulou S. - Karlis D. - Yiannoutsos CT. – Dafni U. (2009) Optimal multi-stage phase II design with sequential testing within each stage for evaluating response rates and survival probabilities. 323-330 Πρακτικά 22ου Πανελληνίου Συνέδριου στατιστικής, Χανιά Απρίλιος 2009
18. Pedeli, X. and Karlis, D. (2010) On composite likelihood estimation of a multivariate Poisson INAR(1) model. *Proceedings of the 25th Workshop in statistical Modelling, July 2010, Glaskow*, pp 429-432
19. Pouloupoulou S., Karlis D. , Yiannoutsos CT. Dafni U. (2010) Adaptive Hypothesis multi-stage Phase II design. Πρακτικά 23ου Πανελληνίου Συνέδριου στατιστικής, Βέροια Απρίλιος 2010
20. Pouloupoulou S. Karlis D. Yiannoutsos CT. Dafni U. (2011) Adaptive Phase II design for evaluating survival probabilities Πρακτικά 24ου Πανελληνίου Συνέδριου στατιστικής, Πάτρα Απρίλιος 2011
21. L. Bermúdez, D. Karlis (2012) How to deal with unobserved heterogeneity when modelling bivariate claim counts, *Proceedings of Actuarial and Financial Mathematics Conference 2012*, 65-71
22. Perrakis, K., Cools, M., Karlis, D., Janssens, D., Kochan, B., Bellemans, T., & Wets, G. (2012). Quantifying Input Uncertainty in Traffic Assignment Models. In *Proceedings of the 91st Annual Meeting of the Transportation Research Board (DVD-ROM). Transportation Research Board of the National Academies*.
23. Oikonomopoulou G., Karlis D.: (2013) Statistical modeling of social networks: An application to co-authorship data. Πρακτικά 26ου Πανελληνίου Συνέδριου Στατιστικής, Πειραιας, Απρίλιος 2013, σελ. 302-310

24. Orfanogiannaki K., Karlis D: (2013) Hidden Markov models in modelling time series of earthquakes. Πρακτικά 26ου Πανελληνίου Συνεδρίου Στατιστικής, Πειραιας, Απρίλιος 2013, σελ. 312-321
25. Orfanogiannaki, K. and Karlis, D. (2013) Hidden Markov models in modelling time series of earthquakes, Proceedings of the 18th Europeans Young Statisticians Meeting, Osijek, Croatia
26. L. Bermúdez, D. Karlis (2014) Risk classification for claim counts using finite mixture models. Proceedings of Actuarial and Financial Mathematics Conference 2014, 71-76
27. Lluís Bermúdez, Montserrat Guillén and Dimitris Karlis. (2015) A bivariate INAR(1) model for insurance claim counts International Conference on Risk Analysis ICRA 6 / RISK 2015 Barcelona, May 26 - 29, 2015, pp 143-151
28. Lluís Bermúdez, Dimitris Karlis and Miguel Santolino (2015). A finite mixture of multiple Poisson distributions for modelling days of absence from work due to motor accident International Conference on Risk Analysis ICRA 6 / RISK 2015 Barcelona, May 26 - 29, 2015, pp 153-160
29. Bermúdez, L., Karlis, D., & Santolino, M. (2018). Modelling motor temporary disability data with periodics peaks. In Contributions to risk analysis: risk 2018 (pp. 71-78). Fundación MAPFRE.
30. Bermúdez, L., & Karlis, D. (2018). Modelling of claim counts using finite mixture models. In Contributions to risk analysis: risk 2018 (pp. 61-69). Fundación MAPFRE.
31. Tripodis, C. and Karlis, D. (2019) Hierarchical forecasting in Greek convenient retail industry. Proceedings of the 32nd Panhellenic Statistics Conference, 392-406
32. Tsamtsakiri P and Karlis, D. (2019) Bayesian analysis for INGARCH models. Πρακτικά 31ου Πανελληνίου Συνεδρίου Στατιστικής, 366-378,
33. Tsamtsakiri, P., & Karlis, D. (2019). Bayesian model selection for a family of discrete valued time series models. In 21st European Young Statisticians Meeting (Vol. 26, No. 1, p. 52).
34. Bermudez, L, and Karlis, D. (2022) Modelling Unobserved Heterogeneity Based On Finite Mixture Of Regressions And A Classification Rule. Proceedings of RISK 2022, 8th Workshop on Risk Management and Insurance Research, 224-232
35. Chasiotis, V. and Karlis, D. (2022) Subdata Selection for big data regression. (Proceedings of the 34th Panhellenic Statistics Conference. Pp 200-215

9. Other Conferences (With presentation by myself)

1. Karlis, D Dellaportas P (1997) Bayesian Estimation for finite Poisson mixtures. 4th Practical Bayesian Conference, Nottingham, July 1997
2. Karlis D., Xekalaki E (1998) Maximum Likelihood Estimation For The Poisson-Binomial Distribution Via The EM Algorithm With Environmental Applications. *SESS- TIES Conference, Athens, August 1999*
3. Karlis D. (2000) Exact ML estimation for Mixed Poisson Regression Models. *Euroworkshop on Mixed Models, Munich, November 2000*
4. Karlis, D. and Xekalaki, E. (2001) Choosing initial values for the EM algorithm for finite Poisson mixtures: A simulation comparison. *Mixtures 2001 Conference, Hamburg, July 2001*

5. Karlis, D. (2002) Model based clustering for count data. 15th *Panhellenic Conference in Statistics*, Ioannina, May 2002
6. Karlis, D. (2002) Overdispersed Integer Valued Autoregressive Models. In *COMPSTAT 2002, Berlin, August 2002*.
7. Karlis, D. and Tsiamyrtzis, P. (2004). Exact Bayesian Inference for Bivariate Poisson data. 2nd *International Workshop in Applied Probability*, Pireaus, Greece, March 2004.
8. Karlis, D. and Papadimitriou A. (2004) Inference for the multivariate Normal Inverse Gaussian Model. 17th *Panhellenic Conference in Statistics, Lefkada, April 2002*.
9. Karlis, D. and Patilea, V. (2005) Bootstrap confidence intervals for reliability measures for discrete distributions. 3rd *IASC Conference, Limassol, Cyprus, 28-31 October 2005*
10. Karlis, D. (2006) Time Series Models for accident count data. Transportation Research Board Conference, Washington DC, January 2006 (invited presentation)
11. Karlis, D. and Nikoloulopoulos, A.K. (2007) Copula Functions for Modelling Multivariate Binary Data, 4th *Eastern Mediterranean Regions biometrics Conferences, Eilat, Israel, 22-25 January, 2007 (Invited)*
12. Karlis, D. and Patilea, V. (2007). A sieve nonparametric maximum likelihood estimator in mixtures of discrete exponential families. German classification society Conference, (GFKL) Freiburg, 7-9 March.
13. Karlis, D. and Arakelian, V. Mixtures of copulas and their applications in clustering. German classification society Conference, (GFKL) Freiburg, 7-9 March.
14. Karlis, D. and Ntzoufras, I. (2007) Bayesian modeling of football outcomes. IMA Conference on mathematics in sports, Manchester, June 2007.
15. Karlis, D. and Andersson, J. (2008) Missing data for discrete valued time series. *COMPSTAT 2008, Porto, Portugal, August 2008*.
16. Karlis, D. and Andersson, J. (2008) Missing Values in Discrete Valued Time Series Models, 4th *IASC Conference, Yokohama, Japan, December 2008*
17. Karlis, D. (2008) On modeling multivariate count data. NIPS, Workshop, December, 2008, Whistler Canada (invited)
18. Karlis, D. and Ntzoufras, I. (2009) Robust fitting of soccer prediction models. 2nd *Conference Mathematics in Sports, Groningen, The Netherlands*
19. Karlis, D. and Andersson, J. (2009) Time series processes in Z: a ZINAR process. Workshop on Integer valued Time series, Aveiro, 3-5 September, 2009
20. Karlis, D, Arakelian, V. (2009) Clustering dependencies via mixture of copulas. 5th *ERCIM, Limassol, Cyprus, October, 2009*
21. Karlis, D. (2010) Model Based Clustering using copulas. Workshop on Model Based Clustering, Grenoble, INRIA, July 2010
22. Karlis, D. (2010) Multivariate Integer Autoregressive Models. In 7th *Conference for Multivariate Distribution and Applications, Maresias, Sao Paolo, Brazil, August 2010*
23. Karlis, D. and Urania Dafni (2010) Estimation of Survival Curves in the Case of "Time Varying Treatment". Symposium in honor of Steve Lagakos, Athens, October 2010.
24. Karlis, D. (2011) Model based clustering via copulas. 24th *Conference of Greek Statistical Institute. Patras, 28 April, 2011*
25. Karlis, D. and Orfanogiannaki, K. (2011) Multivariate Hidden Markov Models for modeling earthquakes. *STATSEI 7*, Santorini, May 2011
26. Karlis, D. and Orfanogiannaki, K. (2011) Multivariate Hidden Markov Models for count data 2nd *International Workshop on Integer Valued Time Series, Cyprus, June 2011*

27. Karlis, D. and Ntzoufras, I. (2011) Bivariate Skellam distributions with applications to soccer modeling and betting. 3rd IMA Conference in Mathematics in Sports, Manchester, UK, June 2011
28. Karlis, D. (2011) Modelling Health Surveillance Data via multivariate discrete time series models. CEIB 2011, XII Spanish-Iberoamerican Conference of Biometrics, Barcelona, September 2011 (invited)
29. Karlis, D. (2012) Composite Likelihood Methods for Discrete Valued Time Series. Workshop on Composite Likelihood, Banff, Canada, April, 2012, (participation by invitation only)
30. Karlis, D. and Kosmidis, I. (2012) Mixture modelling through copulas. Workshop on model based clustering. Guelph Canada, July 2012
31. Karlis, D. (2013) Clustering Longitudinal Count Data. 7th EMR-IBS conference, Tel Aviv, April 2013
32. Dafni, U, Karlis, D and Polydoropoulou, V. (2013) Randomization: To Block or Not To Block, 7th EMR-IBS conference, Tel Aviv, April 2013
33. Karlis, D. (2013) Multivariate count data with censoring, 26th Conference of Greek Statistical Institute. Pireus, 9 May, 2013
34. Karlis, D. (2013) Clustering Longitudinal Count Data. XIV Spanish Biometrics Conference, Ciudad Real, May 2013
35. Karlis, D., Pouloupoulou, S., Dafni, U. (2014) Single-arm Phase II design for time-to-event endpoint based on Edgeworth expansion. 27th International Biometric Conference, Firenze, July 2014
36. Karlis, D. (2014) Model Based clustering for censoring count data. Workshop on Model Based Clustering, Dublin July 2014.
37. Karlis, D. and Pedeli, X. (2015) Modelling multivariate time series of earthquake data: selection of covariance structure. 28th Conference of Greek Statistical Institute. Athens, April, 2015
38. Karlis, D., Dafni, U, Pedeli, X. (2015) Adaptive Designs for Phase II clinical Trials. 8th EMR-IBS Conference, Nevsehir, Turkey, May 2015
39. Karlis, D. and Pedeli, X. (2015) Selection of covariance structure for multivariate count time series of earthquake data. 3rd Workshop on Statistical Modelling of Complexly Correlated Data with Applications, University of Prince Edwards Island, Canada, June 2015 (by invitation)
40. Karlis, D (2015) On Multivariate Time Series for Counts Based on Multivariate Integer Autoregressive models. (Invited Session, 43rd Annual Meeting of the Statistical Society of Canada, Halifax, Canada, June 2015)
41. Karlis, D. (2015) Clustering discrete valued time series, 3rd Meetings of Statistics, Athens June 2015
42. Karlis, D. (2015) Robust modelling in Soccer. 5th Mathsport International Conference, Loughborough, UK, July 2015/07/06
43. Karlis, D., Dafni, U, Pedeli, X. (2015) A new adaptive design for Phase II Clinical Trials. XVth Spanish Biometrics Society Conference. Bilbao, September 2015
44. Karlis, D. (2016) Model Based Clustering using copulas, recent advances. Workshop on Model Based Clustering, Paris, July 2016
45. Karlis, D, Bermudez, L and Santoolino, M. (2016) On mixtures of multiple discrete distributions with application. International Conference on Statistical Distributions and Applications, ICOSDA 2016, Oct. 14-16, 2016, Niagara Falls, Canada
46. Karlis, D. (2016) Statistical modeling and Prediction for Football Games, Workshop on Sports Analytics, November, 2016

47. Karlis, D. (2016) Sports Analytics, Conference of the Greek Society of Administration in Sports, Athens, December 2016.
48. Karlis, D., Bermudez, L. and Santolino, M. (2017) Multiple discrete distributions for modelling heaped count data in health insurance. 9th EMR-IBS Conference, Thessaloniki, May 2017
49. Karlis, D. (2017) Clustering discrete time series data via model based clustering. Working Group on Model Based Clustering, Perugia, July 2017
50. Karlis, D., Manasis, V, and Ntoufras, I. (2017) On the stochastic nature of indices of competitive balance. Conference on Mathematics in Sports, Padova, June 2017
51. Karlis, D., (2017) Clustering with copulas: Some new results. Statistics4@Florence, June 2017
52. Karlis, D. (2017) Models for Football Games, 2nd Workshop on Sports Analytics, November, 2017
53. Karlis, D (2018) Modelling Longitudinal discrete data with a BINAR Regression model, 31st Panhellenic Conference of Statistics, Lamia, May 2018
54. Karlis, D. (2018) Advances on time series for multivariate counts, (invited talk) Multivariate Count Analysis, July 2018 Besancon, France
55. Karlis, D., Stavropoulos, C. and Dafni U. (2018) Adaptive clinical trial designs for survival outcomes considering the proportionality of hazards assumption. XXIXth International Biometric Conference, Barcelona, 2018
56. Karlis, D. (2018) On modelling multivariate time series of counts. COMPSTAT 2018, Iasi, Romania, August 2018
57. Karlis, D (2018) Model Based Clustering through copulas for high dimensional data. Keynote Lecture, Workshop on Model-Based Clustering and Classification, Catania, Italy September 2018
58. Karlis, D (2018) Modelling time series of multivariate counts with applications (invited Talk) . Fifth Workshop on “Recent Developments in Dependence Modelling with Applications in Finance and Insurance ”13-14 September 2018, The Island of Aegina.
59. Karlis, D. (2017) Models for inplay prediction in soccer, 3rd Workshop on Sports Analytics, November, 2018
60. Karlis, D. (2018) Exact Methods for clinical trials with discrete outcome. 10th EMR-IBS Conference, Jerusalem, December 2018
61. Karlis, D. (2018) Parsimonious Model Based clustering with copulas. Greek Stochastics, Kappa, Athens December 2018
62. Karlis, D., Dafni, O. and Dimopoulou, G. (2019) Clinical trials with discrete outcomes: an exact approach. ISCB40, Leuven July 2019
63. Karlis, D., Alexandridis, A.. and Papastamos, D. (2019) “Automatic Mass Valuation for Non-Homogeneous Housing Markets”. 39th International Symposium on Forecasters, Thessaloniki, Greece, 16-19 June 2019.
64. Karlis, D. (2019) Clustering Discrete Valued Time Series, 32nd Panhellenic Statistics Conference, Ioannina, June 2019
65. Karlis, D. and Tzougas, G. (2019) Using the Poisson-Lognormal Regression Model with Varying Dispersion to analyze soccer data. 7th Mathsports International Conference, July 2019, Athens
66. Karlis, D., Kosmidis, I. and Panagou, F. (2019) Model based clustering through copulas: parsimonious models for mixed mode data. 16th Conference of the International Federation of Classification Societies

67. Karlis, D. (2020) A family of discrete distributions for modeling heaped count data. Sixth International Conference on Statistics for Twenty-first Century-2020 [ICSTC-2020] (Virtual, Kerala, India)
68. Karlis, D. (2021) Model based clustering through copulas: parsimonious model. MiMo 2021 : Workshop on Mixture Models. Rouen (virtual)
69. Karlis, D. and Otting, M. (2021) Using player tracking data in football analysis. Euro2021, European Conference in Operational Research, (virtual)
70. Karlis, D, Dafni, U. and Zygoura, P. (2022) An adaptive design to handle deviations from proportionality assumption XVIII Congreso de Biometría CEBMADRID Madrid, May 25-27, 2022
71. Karlis, D. (2022) Modelling basketball data: some new results, 6th Workshop on Sports Analytics, May 2022, Athens.
72. Karlis, D., Papastamos, D and Andritsos, D. (2022) Usage of Automatic Valuation Models for taxation purposes: a case study in Greece. In 28th Annual European Real Estate Society Conference. ERES: Conference. Milan, Italy, 2022.
73. Papastamos, D., Karlis, D., Kekempanos, A. and Alexandridis, A.. (2022) Prediction with limited information in automatic Valuation Systems. In 28th Annual European Real Estate Society Conference. ERES: Conference. Milan, Italy, 2022.
74. Karlis, D., Dafni, U, Zygoura, P. and Dellaporta M.T. (2022) Adaptive designs based on testing for proportional hazards. IBC 2022, Riga Latvia.
75. Karlis, D., Fokianos, K. and Pedeli, X. (2022) High Dimensional Time Series Using a Composite Likelihood Approach With Sparsity. In "8th Dependence Modelling (DEMO) Workshop" Agkistri, Greece, 14-16September 2022.
76. Karlis, D (2023) Technological Advancements in Football Analytics: use of tracking data Leading and Managing in the Digital Era: Athens, June 19-23, 2023
77. Karlis, D and Papastamos, D(2023)Real-Estate Analytics and Automatic Valuation Models: some statistical challenges. Leading and Managing in the Digital Era: Athens, June 19-23, 2023
78. Karlis, D. (2023) Improvements in basketball modelling: some new models. 10th MathSports International, Budapest, June 2023
79. Karlis, D., Fokianos, K and Penteli. X. (2023) Sparse Pairwise Likelihood Inference for Multivariate Time Series Models. Statistics@Naples, June 2023
80. Karlis, D., Papastamos, D. and Andritsos, D. (2023) Impact of environment related variables in real estate valuations and risk management. 12th International Conference of the Financial Engineering and Banking Society, Chania, Greece, June 2023
81. Karlis, D. (2023) Play by play data from Euro League and the theory of chaos. 7th AUEB Workshop on Sports Analytics, Athens May 2023
82. Karlis, D., Rompoti, G. and Dafni, U (2023) Reconstructing survival data from published Kaplan-Meier curves 12th EMR-IBS Conference, Izmir, May 2023
83. Karlis, D. (2023) Financial Modelling & Forecasting and B2C challenges 5th European FECMA conference, Athens, June 2023
84. Karlis, D. (2023) Clinical Trials in the era of big data. Meeting organized by Frontier Science Foundation for celebrating its 15 years, Sounion, Greece, May 2023.
85. Karlis, D., Papastamos, D. and Andritsos, D. (2023) Effects of environment-related variables in real estate prices. Workshop on the effect of climate change in Financial and Actuarial Organizations, Athens, Evgenidion Foundation, April, 2023
86. Karlis, D, and Champezou, L. (2023) Model based clustering for spatiotemporal count data. Working Group on Model Based Clustering, July 2023, Pittsburgh

87. Karlis, D. Mazo, G. and Rau, A.(2023) Randomized pairwise likelihood approach. Research Conference of the Dept of Statistics, AUEB, June 2023
88. Karlis, D., Panagou, F, and Georgiou K. (2023) On Estimation of Lifetime Probability of Default Based on Immature Credit Risk Data. Presented at the Credit Scoring and Credit Control XVIII Conference, Edinburgh, August 2023
89. Karlis, D. (2023) Improvements in basketball modelling: some new models, 10th MATHSports International, Budapest June 2023
90. Karlis, D., Pedeli, X. and Fokianos, K. (2023) Sparse Pairwise Likelihood Inference for Multivariate Time Series Models, Statistics@Naples, June 2023
91. Karlis, D. (2024) Models for integer data. Workshop on “Discrete Distributions” In Memory of Adrienne Freda Kemp, April 2024, Athens.
92. Karlis, D, Dafni, U, Dellaporta, T and Schoenfeld, A. (2024) Single-arm hierarchical testing with historical controls. Poster presented in the ISCB2024 Conference, Thessaloniki, July 2024
93. Tsotra F. and Karlis, D. (2024), Selection of time to measure the RMST: A simulation study. Poster presented in the ISCB2024 Conference, Thessaloniki, July 2024
94. Karlis, D. and Iannario,M.(2024) Dyadic multivariate mixture models for the analysis of elite swimmers. Working Group on Model Based Clustering, Bertinoro, Bologna, July 2024
95. Karlis, D., Bermudez, L. and Bolance, K. (2024) Joint models for claim frequency and severity AUEB Statistical Data Science & Economics Conference 2024, 28th-30th August 2024, Aegina
96. Karlis, D., Oeting, M, Michels, R. (2024) Statistical Models in Handball, 18th International Joint Conference on Computational and Financial Econometrics (CFE) and Computational and Methodological Statistics (CMStatistics), CFE-CMStatistics 2024, London

Coauthor presented

1. Brijs, T., Karlis, D., Swinnen, G., Vanhoof, K., and Wets, G. (2002), Tuning the multivariate Poisson mixture model for clustering supermarket shoppers, at: *Statistical Modelling and Inference for Complex Data Structures, poster paper, Louvain-La-Neuve, May 21-23.*
2. Iliopoulos, G. and Karlis, D. (2002) Simulation from the Bessel distribution with applications. *15th Panhellenic Conference in Statistics, Ioannina, May 2002*
3. Tsiamirtzis, P. and D. Karlis (2003). Strategies for efficient computation of multivariate Poisson probabilities. *Recent Advances in Statistical Designs and Related Combinatorics, Athens 7-9 of July 2003, conference in honour of Prof. St. Kounias.*
4. Patilea, V and Karlis, D. (2003). Intervalles de confiance bootstrap pour les mélanges des lois discrètes 34th Conference of France Statistical Society, Lyon, June 2003
5. Brijs T., Karlis D., Van den Bossche F. and Wets G. (2004). A Bayesian Model for Ranking Hazardous Sites. CORS/INFORMS Joint International Meeting, Banff, Canada, 16-19 May 2004.
6. Karlis, D and Nikoloulopoulos, A. (2005) Modelling bivariate count data using copulas. 3rd EMR-IBS Conference, Corfu, May 2005
7. Ntzoufras, I. and Karlis, D. (2005). Bayesian modelling of Poisson difference data. 3rd EMR-IBS Conference, Corfu, May 2005

8. Nikoloulopoulos, A.K. and Karlis D. (2006). Modelling multivariate binary data using copulas. 19th Panhellenic Conference in statistics, Kastoria, Greece, April 2006
9. Ntzoufras, I. and Karlis, D. (2005) Bayesian analysis of bivariate count data. . 3rd IASC Conference, Limassol, Cyprus, 28-31 October 2005
10. Xekalaki, E. and Karlis, D. (2006) The Polygonal Distribution . International Conference on Mathematical and Statistical Modelling in Honour of Enrique Castillo (ICMSM 2006)
11. Arakelian, V. and Karlis, D. (2006) Financial applications of flexible copula families based on mixing. 12th International Conference On Computing In Economics And Finance Limassol, Cyprus, June 22-24, 2006
12. Orfanogiannaki K., Karlis, D. and G. Papadopoulos (2006) Identification of seismicity patterns in Sumatra using Poisson Hidden Markov models. 11th International Symposium on Natural and Human Induced Hazards & 2nd Workshop on Earthquake Prediction University of Patras, Greece, 22-25 June 2006
13. Nikoloulopoulos, A.K. and Karlis, D. (2007) Finite normal mixture copula for modelling multivariate discrete data. IAP Workshop on statistical Inference for dependent data, Hasselt, Belgium, 26-27 April, 2007.
14. K. Orfanogiannaki, D. Karlis and G.A. Papadopoulos (2007) Application of Poisson Hidden Markov Models on Foreshock Sequences: The Cases of Samos, October 2005, And Zakynthos, April 2006, Earthquakes ASMDA 2007, Chania
15. Nikoloulopoulos, A., K. and D. Karlis: (2007) Finite Normal Mixture Copula for Modelling Multivariate Discrete Data. The 6th Conference on Multivariate Distributions with Fixed Marginals and Given Dependence Structure, Tartu, Estonia, June 2007
16. Jonas Andersson and Dimitris Karlis (2008) Treating missing values in INAR(1) models International Workshop in Recent Advances in Time Series Analysis University of Cyprus, Cyprus, June 2008
17. Pedeli, X. and Karlis, D. (2009) A Bivariate Integer Autoregressive Model. 5th EMR-IBS conference, Istanbul, May 2009
18. Bermudez-Morata, L. and Karlis, D. (2009) Modelling Dependence in a Ratemaking Procedure Using Bayesian Multivariate Poisson Regression Models. 13th Conference in Insurance: Mathematics and Economics, Istanbul, May 2009
19. Ghitany, M, Karlis, D. AL-Mutairi, D. (2010) Multivariate Poisson-Inverse Gaussian Regression Model. In The 7th Conference on Multivariate Distributions with Applications, Maresias, Sao Paolo, Brazil, August 2010
20. Pedeli, X. and Karlis, D. (2010) On Some Multivariate Integer-Valued Autoregressive Models. 28th European Meeting of statisticians, Athens Greece, August 2010.
21. Bermúdez, L. and Karlis, D. (2010) “Mixture of bivariate Poisson regressions with an application to insurance” 3rd International Conference of the ERCIM WG on COMPUTING & STATISTICS (ERCIM'10), London (United Kingdom), December 10- 12.
22. Orfanogiannaki, K. and Karlis, D. (2010) Multivariate Hidden Markov Models for discrete data. 28th European Meeting of Statisticians, Athens Greece, August 2010
23. Pedeli, X. and Karlis, D. (2011) On a Modified Bivariate INAR(1) Process 2nd International Workshop on Integer Valued Time Series, Cyprus, June 2011
24. Bermúdez, L. and Karlis, D. (2011) “Mixture of Bivariate Poisson Regressions with an Application to insurance” IV Conferencia anual UB-IREA, Barcelona (March, 14).

25. Bermúdez, L. and Karlis, D. (2011) “Actuarial implications when modelling bivariate claim counts” 4th Workshop on Risk Management and Insurance, RIESGO 2011, Seville (October, 20-21).
26. Urania Dafni and Dimitris Karlis (2011) Graphical Presentation for the Cox Model with Time-Varying Covariates ICASA 2011 Applied Statistics Symposium, June 26-29, 2011
27. I. Kosmidis and D. Karlis (2011) Model-based clustering via copulas. ERCIM 2011, London, December 2011
28. I. Ntzoufras and D. Karlis (2013) Modeling goal arrival times in association football. 4th Conference in Mathematics in Sports, Leuven 6-8 June, 2013.
29. Bermudez, L. and Karlis, D. (2013) A posteriori ratemaking using bivariate Poisson models. The 17th International Congress on Insurance: Mathematics and Economics July 1-3, 2013 Copenhagen
30. Pedeli, X and Karlis, D. (2014) Count time Series model for syndromic surveillance and outbreak detection. 27th International Biometric Society Conference, Florence, July 2014
31. Sudipt Roy, Purushottam Papatla, Dimitris Karlis (2014) Do Supplements Increase Customer Retention? Investigation with a Copula for Multivariate Poisson Renewals, 2014 INFORMS Marketing Science Conference
32. Chaniavidis, C., Friel, N., Karlis, D., and Ntzoufras, I. (2015) Analysis of soccer data using COM-Poisson regression models. 5th Mathsport International Conference, Loughborough, UK, July 2015
33. Bermudez, L, Guillen, M. and Karlis, D. (2017) A bivariate regression model for panel count data 21st International Congress on Insurance: Mathematics and Economics - IME 2017 Vienna, July 3–5, 2017
34. Tzougas, G. Karlis, D. and Frangos, . (2017) Confidence Intervals of the Premiums of Optimal Bonus-Malus Systems. 21st International Congress on Insurance: Mathematics and Economics - IME 2017 Vienna, July 3–5, 2017
35. Bermudez, L., Karlis, D. and Santolino, M. (2017) Modelling work disability days data for workers compensation insurance 21st International Congress on Insurance: Mathematics and Economics - IME 2017 Vienna, July 3–5, 2017
36. Eleftheriou, D. and Karlis, D. (2017) On detecting the change-points in piecewise regression models 9th EMR-IBS Conference, Thessaloniki, May 2017
37. Panagou, F. and Karlis, D. (2017) Use of Gaussian copula for clustering mixed mode data 30th Panhellenic Conference in Statistics, Pyla, Cyprus, April 2017
38. Bermudez, L, Guillen, M. and Karlis, D. (2017) A bivariate INAR(1) regression model for insurance claim counts Workshop on “Recent Developments in Dependence Modelling with Applications in Finance and Insurance” 22-23 May 2017, The Island of Aegina
39. Orfanogiannaki, K, Karlis, D. and G. A. Papadopoulos (2017) Developing earthquake probability forecasts from statistical models: The case study of the Killini region, Western Greece. Safe Athens 2017, New Technologies for Civil Protection, Athens June 2017
40. Alexandridis, A.K., Karlis, D., Papastamos, D., (2017). “Real Estate valuation and forecasting in non-homogeneous markets: A case study in Greece during the financial crisis.” In: 7th International Conference of the Financial Engineering and Banking Society. Glasgow, Scotland, 1st -3rd June, 2017
41. Papastamos, Dimitrios, Antonis Alexandridis, and Dimitris Karlis. "Real Estate valuation and forecasting in non-homogeneous markets: A case study in Greece

- during the financial crisis." In 24th Annual European Real Estate Society Conference. ERES: Conference. Delft, Netherlands, 2017.
42. Tsamstakiri, P, and Karlis, D (2018) Bayesian Estimation for Poisson INGARCH model, 31st Panhellenic Conference of Statistics, Lamia, May 2018
 43. Dafni U., Zygoura, P, Karlis, D., (2018) Statistical assessment of the characteristics of the ESMO Magnitude of Clinical Benefit Scale (ESMO-MCBS) threshold rules XXIXth International Biometric Conference, Barelona, 2018
 44. Bermudez, L. and Karlis, D. (2018) Bivariate Random Effects Models for Panel Count Data. 4th European Actuarial Journal Conference, Leuven, September 2018
 45. Vervita K., Karlis, D, Dafni U. (2018) Mixture of Weibull Regressions as Parametric Models for flexible Hazard functions. 10th EMR-IBS Conference, Jerusalem, December 2018
 46. Zygoura, P. Dafni U and Karlis, D (2018) Comparative Assessment of clinical benefit using the ESMO_ Magnitude of Clinical Benefit Scale and the ASCO value framework net health benefit score. 10th EMR-IBS Conference, Jerusalem, December 2018
 47. Dafni, U, Karlis, D., Zygoura, P. (2018) Statistical development of the dual rule for evaluating the magnitude of clinical benefit (ESMO_MCBS) 10th EMR-IBS Conference, Jerusalem, December 2018
 48. Leriou, I., Ntzoufras, I. and Karlis, D. (2019) Survival Modelling of Goal Arrival Times in Champions League. 7th Mathsports International Conference, July 2019, Athens
 49. Tripodis, C. and Karlis, D (2019) Hierarchical Forecasting in Greek Convenience retail industry. 32nd Panhellenic Statistics Conference, Ioannina, June 2019
 50. Tsamtsakiri, P and Karlis, D. (2019) A new bivariate INGARCH model based on Sarmanov Distributions. 32nd Panhellenic Statistics Conference, Ioannina, June 2019
 51. Tsamtsakiri, P and Karlis, D. (2019) Construction of Bivariate distributions with flexible structure. Statistics @Aegina 5th Greco-Italian Meeting of Statistics, Aegina, September 2019
 52. Otting, M and Karlis, D (2021) Analysing football tactics using high-frequency tracking data, 8th Mathsports International Conference (virtual)
 53. Bermudez, L and Karlis, D. (2021) Ratemaking Based on Finite Mixture of Regressions and a Classification Rule 24th International Congress on Insurance: Mathematics and Economics (IME) (virtual)
 54. Zygoura, P., Karlis, D, Dafni, U. and On a composite endpoint for cancer studies , XVIII Congreso de Biometría CEBMADRID Madrid, May 25-27, 2022
 55. Chasiotis, V and Karlis, D (2022) Subdata Selection for big data regression. 34th Panhellenic Statistics Conference
 56. P. Tsamtsakiri, D. Karlis (2022) A novel conditional autoregressive range model. 34th Panhellenic Statistics Conference
 57. Bermudez, L. and Karlis, D. (2022) Modelling bivariate claim count data using a finite mixture of regressions and a classification rule. 10th International Hybrid Conference on MATHEMATICAL AND STATISTICAL METHODS FOR ACTUARIAL SCIENCES AND FINANCE MAF2022, University of Salerno, 20-22 April 2022
 58. Bermudez, L., Karlis, D, Bolance, K. (2024) A finite mixture approach to model jointly claim frequency and severity. 27th Insurance Mathematics and Economics Congress, Chicago, July 2024
 97. Chasiotis, V, Wang, L and Karlis, D. (2024) Variable shrinkage and subdata selection in big data. 18th International Joint Conference on Computational and Financial

10. Business Congresses

- Καρλής Δ. (2016) Στατιστική και στοίχημα. Ημερίδα με θέμα Τυχερά Παίγνια στην Ελλάδα της κρίσης», Ιανουάριος 2016, Αθήνα (in Greek)
- Καρλής Δ. (2016) Sports Analytics, changing the Game, 360 Forum for Business Analytics, Αθήνα, Απρίλιος 2016
- Καρλής Δ. (2024) Sports analytics, when sports meet Data Analysis. Sports Business Forum, Athens Δεκέμβριος 2024

11. Citations

Scholar google account

<https://scholar.google.gr/citations?user=imkGH5wAAAAJ&hl=el&oi=ao>

	All	Since 2020
<u>Citations</u>	7381	3118
<u>h-index</u>	44	30
<u>i10-index</u>	95	65

Accessed in 15/01/2025

Παρατίθεται από Προβολή όλων

12. Invited Talks

- Multivariate Poisson models: Invited talk in the Department of Applied Economics, University of Diependeek, Limburg, Belgium. (23 October 2002)
- Short course on Bayesian Statistics: Department of Applied Economics, University of Diependeek, Limburg, Belgium. (13-14 February 2003)
- An introduction to Bootstrap: short course during the 17th Panhellenic Statistical Conference Lefkada, April 2004.
- Issues in statistical Credit scoring, Norwegian Business School, Bergen, Norway (30 April, 2004)
- Advanced Statistical models in credit scoring. Department of Applied Economics, University of Diependeek, Limburg, Belgium. (May 2004)
- On modelling multivariate count data, Department of Biostatistics, Katholik Universitair Leueven, April (2005)
- Model Based Clustering for non-elliptical distributions. Invited talk in Dept of Mathematics and Statistics, University of Lancaster, 27 June, 2007

- Treating missing values in INAR model with an application to syndromic surveillance, 18 April, 2008, Center for Statistics, University of Hasselt.
- Statistical modeling for soccer data. Norwegian School of Economics and Business Administration, Bergen, Norway, September 2008
- Missing Data for discrete time series models. 12 December 2008, Dept of Statistics, University of British Columbia, Canada
- “Mixed Poisson Distribution” 18 October, 2009, Department of Statistics and Operational Research, University of Kuwait, Kuwait City.
- “On models for multivariate count data”, February 4th, 2010, University of Barcelona
- “Modeling multivariate time series for counts” on September, 2010, University of Hasselt
- “Multivariate Integer values autoregressive models” on October 2011, University of Laval, Quebec city
- “Composite Likelihood methods for discrete valued time series” on October 2011, University of Quebec at Montreal,
- “Modelling multivariate time series for counts”, on March, 2012, University College London.
- “On multivariate time series for counts”. on March, 2012, University of East Anglia, UK.
- “Multivariate count data with censoring” on June 2013, RWTH University of Aachen, Germany
- “Parametric Time Series Models with Covariates for Integers in Z ”, September 2013, Universitat Autònoma Barcelona
- “Censoring in multivariate count data: an application to marketing” September 2014, Université de Lille II
- “Clustering discrete time series data via model-based clustering”, March, 2015, University Ca Foscari, Venice, Italy.
- "Model-based clustering: an approach based on copulas", October 2016, University of Buffalo, USA
- “Censored Multivariate Discrete data and Application in Marketing” October, 2016, University of Wisconsin, Milwaukee,
- “Modelling multivariate time series of counts with applications” May 2018,
- “Clinical trials in the era of Big Data” November 2018, European Thoracic Oncology Platform, Residential Meeting, Barcelona, November 2018.
- Model Based Clustering through Copulas for High Dimensional Data, Aristotle University of Thessaloniki, December 2019
- Bivariate Models for Ratemaking, Norwegian School of Business, Bergen Norway, March 2020
- Uncertainty in competitive balance: a model-based approach. Reading on Sports Economics Seminar, 16 October 2020
- A randomized pairwise likelihood method. Dept of Mathematics, Durham University UK, February 22, 2021
- Στατιστική και Κλινικές Δοκιμές, Λέσχη φίλων Μαθηματικών, Πανεπιστήμιο Ιωάννινων, Τμήμα Μαθηματικών
- Model Based Clustering: EM and MCMC considerations, Seminar, Dept of Mathematics, University of Athens
- Model Based Clustering for Categorical Time Series, INRAE, Jouy En Josas, Paris, November 2021

- Karlis, D. (2023) Artificial Intelligence Applications in Football: the case of tracking data. University of Mauritius, October 2023
- Karlis, D. (2024) Extending Random Coefficient INAR models. University College Dublin, December 2024

13.Lecture Notes

1. Computational Statistics (255 pages)
2. Multivariate Statistical Analysis (340 pages)
3. Statistics for Archaeometrics (150 pages)
4. An Introduction to SPLUS/R (185 pages)

14.Books (in Greek)

- Καρλής, Δ., Πολυμεταβλητή Στατιστική Ανάλυση (2005, Εκδόσεις Σταμούλη)
- Καρλής, Δ. και Ντζούφρας, Ι. Εισαγωγή στον Προγραμματισμό με R. (2015, Εκδόσεις Κάλλιππος)

15.Refereeing

I have refereed around 340 papers in several journals, including JASA, JRSS, Biometrics, Bimetrika, CSDA, JCGS, Statistics and Computing, Annals of Statistics, Annals of Applied Statistics and several others.

16.Memberships

- Member of the American Statistical Association
- Member of the International Statistical Institute (elected)
- Member of the International Biometric Society (Eastern Mediterranean Region)
- Member of the Greek Statistical Institute

17.Organizing Committees

- Member of the Organizing Committee of the 17th Workshop on Statistical Modelling in Chania (July 2002)
- Member of the Organizing Committee of the 17th Greek Statistical Conference in Lefkada (April 2004)
- Member of the Organizing Committee of the 3rd EMR-Biometrics Conference in Kerkira (May 2005)
- Member of the Organizing Committee of the ISCB conference in Alexandroupolis (July 2007)
- Member of the Organizing Committee of the 6th EMR-Biometrics Conference in Crete (May 2011)
- Chair of the Organizing Committee of the 9th EMR-Biometrics Conference in Thessaloniki (May 2017)
- Co-Chair of the Organizing Committee of the 7th Mathsports International Conference, Athens July 2019
- Co-Chair of 5th Greek-Italian Statistical Meeting, Aegina, September 2019

- Member of the Organizing and the Scientific Committee of the ISCB conference in Thessaloniki (July 2024)

18. Phd Committees (as external)

As external (other Universities)

- Member of the jury of the Ph D presentation of Tom Brijs, Limburg Univeristy, Belgium.
- Member of the jury of the Ph D presentation of Veanous Arakelian, Athens University of Economics Greece
- Member of the jury of the Ph D presentation of Liu Feng, Univeristy of Hasselt, Belgium. (2007)
- Member of the jury of the PhD presentation of Ms Sonia Malefaki, University of Peireaus, Greece (Septmeber 2008)
- Member of the jury of the PhD presentation of Mr Kostas Fragiadakis, Athens University, Greece (September 2009)
- Member of the jury of the PhD presentation of Mr Shaochuan Lu, School of Mathematics, Statistics and Operations Research, Victoria university of Wellington, New Zealand
- Member of the jury of the PhD presentation of Mr Panagiotis Papastamoulis, University of Peireaus, Greece (September 2010)
- Member of the jury of the PhD of Mrs Vasiliki Christou, University of Cyprus (November 2013)
- Member of the jury of the PhD of Mathieu Marback, University of Lille (July 2014)
- Member of the jury of the PhD of Pertsinidou E., Aristotle University of Thessaloniki and University of Compiègne, France (joint PhD program) March 2017
- Member of the jury of the PhD of Amanda Fernandez-Fontelo, University Autonoma de Barcelona, November 2018
- Member of the jury of the PhD presentation of Lia Dikopoulou, Univeristy of Hasselt, Belgium. (2020)
- Member of the jury of the PhD presentation of Nikolas Martzikos, National Technical University of Athens, Greece, (2021)
- Member of the jury of the PhD of Hardeep Kaur, UCD, Ireland (2024)

19. Editorships

- **Editor in chief** – Journal of Quantitative Analysis in Sports, 2020 - 2023
- **Associate Editor** for Metron journal (2007-)
- **Associate Editor** for Communications in Statistics (2008 -)
- **Associate Editor** for IMA Journal of Mathematics in Management (2009 - 2022)
- **Associate Editor** for Stochastic Environmental Research and Risk Assessment (2012- 2017)
- **Associate Editor** Risks (2020-)
- **Associate Editor** Journal of Quantitative Analysis in Sports, 2023 -
- Guest editor for the volume of Proceedings of the Greek Conference of Statistics 2013.
- Editor of Biometrics Bulletin (2013- 2015)
- Guest Editor in IMA Journal of Mathematics in Management special issue on Mathematics in Sports (2020)

Other

- Reviewer για το *Zentralblat MATH* (24 reviews) .
- Reviewer for TRB, NIPS and AISTAT, ICODS conferences
- Visitor in Limburg Univeristy, Belgium (January- February 2003)

- Invited Speaker in the TRB2006 conference, Washington DC, Session of time series
- Publicity Officer of the EMR-IBS (2007-2013)
- Secretary, EMR-IBS (2013-2015)
- President, EMR-IBS (2017-2019)
- Visitor, institute of Transportation, Hasselt University (February – June 2008)

20. Awards

12th Ferran Armengol i Tubau Prize by the **Catalan Economics Society** of the **Institute for Catalan Studies** for contributions to Actuarial Science (May 2019)

21. Invited Courses given

- **Computational statistics** (Master in statistics, University of Barcelona, July 2010)
- **Discrete Choice models** (Master in Transportation, University of Hasselt, September, 2012)
- **Predictive Analytics** (Seminar on Business Analytics, Athens, AUEB, November 2012)
- **Statistical and Predictive Analytics** (1st summer school on E-Business, Molivos Lesvos, August 2013)
- **On Adaptive Designs for Clinical Trials:** IPSEN Pharmaceuticals Paris, November 2019
- **Adaptive Designs**, Summer School in Biostatistics organized by AUEB,FSFH, NKUA and Indiana University, July 2022
- **Unsupervised Statistical Learning Methods:** Blended Integrated Program, University Federico II, Naples, September 2023
- **Methods for dimension reduction and clustering in Fintech surveys**, Blended Integrated Program on “Methods for Fintech and Artificial Intelligence in Finance”, University Federico II, Naples, September 2024

22. Administration Duties

- Board of Directors member, Frontier Science Foundation Hellas (2007- today)
- Secretary treasurer of the EMR/IBS (2013-2015)
- Member of the Communication committee of International Biometric Society (2013-2015)
- President of the EMR/IBS (2017-2019)
- Member of the Research Board, AUEB (2013 - today)
- Vice President, Research Board of AUEB (2020 -today)
- Deputy Head of the Department of Statistics (2016 – today)
- Director of the Master program in Statistics, Dept of Statistic, AUEB, (2018 - today)
- Director of the Laboratory of Computational and Bayesian Statistics, AUEB (2017- today)

23. Theses supervised

PhD Thesis Completed

1. Nikoloulopoulos, A.K. (2007) Applications of copula function in statistics.
2. Pedeli X. (2011) Multivariate time series models for count data.
3. Pouloupoulou, S. (2013) Adaptive Designs in Phase II Clinical Trials.
4. Orfanogiannaki, K. (2015) Hidden Markov models for seismicity modelling.

5. Panagou, F. (2022) Model based clustering for mixed mode data.
6. Tsamtsakiri (2023) On multivariate time series for counts.

Co-supervision

7. Azmi, Chutoo. (2023) The Family of Thinning Based Integer Valued Autoregressive Models for Spatial Count Data with Different Types of Lattice Structures, University of Mauritius

Ongoing

1. Zygoura, P. (2018 -) Issues on clinical trials.
2. Nalpantidi, A. (2022 -) Clustering mixed mode time series