Curriculum Vitae
Dimitris Karlis

Contents

1. Personal details

NAME	Dimitris
SURNAME	Karlis
DATE OF BIRTH	2 February 1971

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MARITAL STATUS	Married
NATIONALITY	Greek
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2. Education

1988 – 1992   **BSc in Statistics**,
Athens University of Economics and Business (ASOEE) Department of Statistics (8.5/10).

1994 -1998   **PhD in Applied Statistics and Computational Statistics** (supported from the State Scholarships Foundation of Greece).
Title: "*Estimation and Testing Problems in Poisson Mixtures*"
Supervisor: Prof. Evdokia Xekalaki
External Examiners: Sir David Cox

3. Scholarships

1992   Erasmus scholarship for attending courses at the Dept of Probability and Statistics, Sheffield University, United Kingdom (one semester)

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

4. Working Experience and Research Projects

	Data Research and Consulting:
March 1995 – June 1995	Statistical Analysis of a political survey concerning voting attributes of the Achaia territory
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)
September 1997-November 1998	Responsible for organisational matters for the project "Professional Practice'' of the Dept of Statistics, AUEB
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
March 2000- July 2001	Visiting Lecturer, Dept of Statistics, Athens University and Economics. Courses taught: Multivariate statistical Analysis
November 2001 – October 2004	Lecturer Dept of Statistics, Athens University and Economics.
January 2003 – February 2003	Visitor in the Dept of Business Informatics, Limburg Universitatair Centrum; Belgium
November 2004 – December 2010	Assistant Professor Dept of Statistics, Athens University and Economics.
December 2010 - today	Associate Professor Dept of Statistics, Athens University and Economic
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 -   Integration of Social Survey in a modular system.
                                  (Project Funded by Eurostat)

5. Research Papers

Papers published

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 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. *Inusrance: 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 Meligκotsidou, 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 Analysiς,* 53, 894-899

48. Nikoloulopoulos, A.K. and Karlis, D. (2009) Finite normal mixture copula for m odeling 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. amd 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. Poulopoulou, 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. (2014) 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 (to appear)*
72. Meintanis, S.G. and Karlis, D. (2014) Validation Tests for the Innovation Distribution in INAR Time Series Models *Computational Statistics (to appear)*
73. O'Hagan,A., Murphy,B., Gormley, C., McNicholas, P. and Karlis, D. (2014) Clustering with the Multivariate Normal Inverse Gaussian Distribution *Computational Statistics and Data Analysis*, 10.1016/j.csda.2014.09.006
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. (2015) Model Based clustering using copulas. Statistics and Computing (to appear)
77. Bermudez, L. and Karlis, D. (2015) A posteriori ratemaking using bivariate Poisson models. *Scandinavian Actuarial journal* (accepted)
78. Karlis, D., Papatla, P, Roy, S. (2015) Finite Mixtures of Censored Poisson Regression Models. *Statistica Neerlandica (accepted)*

6. 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 (Artifical 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. (2015) 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,

7. Unpublished papers

1. Dellaportas P, Karlis D. Xekalaki E. (1999) Credit Scoring via Bayesian analysis of finite Poisson mixtures .

2. Panaretos J., Psarakis S., Xekalaki E. and Karlis D. (2000) The correlated gamma-ratio distiribution in model evaluation and selection
3. Karlis, D. Saporta, G, Spinakis, A. and Anastasiou, G. (2001) On a statistical software package for "non-experts" users: methodological approach.
4. Brijs, T., Karlis, D., Van den Bossche, P., Wets, G. (2005) A Poisson-Binomial Hierarchical Bayes Model For Ranking Hazardous Road Locations
5. Karlis, D.,Karvounaraki, A., Panaretos, J. (2004) A new family of multivariate gamma distributions.

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, Behing, 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 Orleane, 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 *Panhelenic 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. Poulopoulou 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 Πανελληνιου 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. Poulopoulou S., Karlis D. , Yiannoutsos CT. Dafni U. (2010) Adaptive Hypothesis multi-stage Phase II design. Πρακτικά 23ου Πανελληνιου Συνέδριου στατιστικής, Βέροια Απρίλιος 2010

20. Poulopoulou S. Karlis D. Yiannoutsos CT. Dafni U. (2011) Adaptive Phase II design for evaluating survival probabilities Πρακτικά 24ου Πανελληνιου 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. L. Bermúdez, D. Karlis (2014) Risk classification for claim counts using finite mixture models. Proceedings of Actuarial and Financial Mathematics Conference 2014, 71-76

23. 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

24. 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

9. **Other Conferences (**With presentation)

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 *Panhelenic 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 Panhelenic Confenrence 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 Eeastern Mediteranean 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., Poulopoulou, 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

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 Panhelenic Confenrence in Statistics , Ioannina, May 2002*
3. Tsiamyrtzis, 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 Panehellenic 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, Ausust 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 ICSA 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. Chanialidis, 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

Technical reports

(only those that have not been published in journals)

Karlis, D. and Xekalaki E. (1999) Maximum likelihood estimation for the Poisson-binomial distribution via the em algorithm with applications to discrete time series models. *Technical Report 62, Dept of Statistics Athens University of Economics March 1999*

Karlis, D. and Xekalaki E. (1999) Polygonal Distributions. *Technical Report 88, Dept of Statistics Athens University of Economics July 1999*

Karlis, D. and Xekalaki, E. (2000) On some distributions arising from the Triangular Distribution *Technical Report 111, Department of Statistics, Athens University of Economics August 2000*

Yiokari, N., Xekalaki, E. and Karlis, D. (2001). "On Some Discrete-Valued Time Series Models Based on Mixtures and Thinning", *Technical Report no 126, Department of Statistics, Athens University of Economics and Business, February 2001.*

Karlis, D. And Xekalaki, E. (2001). On Implementing The EM Algorithm In Finite Poisson Mixtures. *Technical Report No 132, Department of Statistics, Athens University of Economics, March 2001*

Karlis, D. (2001) A Cautionary Note About The EM Algorithm For Finite Exponential Mixtures. *Technical Report No 150, Department of Statistics, Athens University of Economics August, 2001*

Karlis, D. and Papadimitriou, A. (2003). Maximum likelihood estimation for the multivariate Normal Inverse Gaussian model. *Technical Report No 202, Department of Statistics, Athens University of Economics, September, 2003*

Geurts, K., Wets, G., Brijs, D., Karlis, D. and Vanhoof, K. (2004). Ranking and selecting dangerous accident locations: Correcting for the number of passengers and Bayesian Ranking plots. *Technical Report, RA-2004-43, The Policy Research Centre for Traffic Safety, Belgium.*

Orfanogiannaki, K., Karlis, D, and Papadopoulos, G. (2008) Identification of seismicity patterns using Poisson Hidden Markov models *Technical Report No 237, Department of Statistics, Athens University of Economics, July, 2008*

Pedeli, X. and D. Karlis. Bivariate INAR(1) models. Technical Report no.247, Department of Statistics, Athens University of Economics and Business, June, 2009.

Lluís Bermúdez and Karlis, D. (2010) Modelling dependence in a ratemaking procedure with multivariate Poisson regression models DOCUMENT DE TREBALL XREAP2010-4, University of Barcelona

Bermudez, L. and Karlis, D. (2011) Mixture of Bivariate Poisson Regressions with an Application to insurance. DOCUMENT DE TREBALL XREAP2011-10, University of Barcelona

10. Citations

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

	All	Since 2010
Citations	1846	1264
h-index	25	19
i10-index	48	40

Accessed in 5th of May 2015

Scopus: excluding self-citations: 743 (5th of May 2015)

11. 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 Autonoma Barcelona
- "Censoring in multivariate count data: an application to marketing" September 2014, Universite de Lille II
- "Clustering discrete time series data via model-based clustering", March, 2015, University Ca Foscari, Venice, Italy.

12. 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)

13. Books
Πολυμεταβλητή Στατιστική Ανάλυση (2005, Εκδόσεις Σταμούλη)

14. Refereeing

I have refereed around 184 papers in several journals.
- *Advances in Data Analysis and Classification (2)*
- *American Statistician (3)*
- *Annals of Applied Statistics (3)*
- *Applied Stochastic Models in Business and Industry (2)*
- *Applied Mathematical Letters (1)*
- *Australian and New Zealand Journal of Statistics (2)*
- *Biometrical Journal (2)*
- *Biometrics (3)*
- *Biometrika (1)*
- *BMC Medical Informatics and Decision Making (1)*
- *Bulettin of the Malaysian Mathematical Society (2)*
- *Brazilian Journal of Probability and Statistics (6)*
- *Canadian Journal of Statistics (1)*
- *Communications in Statistics (10)*

- *Computational Statistics and Data Analysis (35)*
- *Computational Statistics (1)*
- *Computers and Mathematics with Applications (1)*
- *Hacettepe Journal of Mathematics and Statistics (1)*
- *IIE Transactions (1)*
- *IMA Journal of Management Mathematics (3)*
- *Information Sciences (1)*
- *International Journal of Applied Earth Observation and Geoinformation(1)*
- *International Journal of Forecasting (1)*
- *International Journal of Systems Science (1)*
- *Journal of Advanced Transportation (1)*
- *Journal of American Statistical Association (5)*
- *Journal of Applied Probability and Statistics (1)*
- *Journal of Applied Statistics (6)*
- *Journal of Econometrics (1)*
- *Journal of Multivariate Analysis (6)*
- *Journal of Probability and Statistics (3)*
- *Journal of Quantitative Analysis in Sports (4)*
- *Journal of Sports Economics (1)*
- *Journal of Statistical Computation and Simulation (2)*
- *Journal of Statistical Planning and Inference (4)*
- *Journal of statistical Software (1)*
- *Journal of Statistical Theory & Practice (1)*
- *Journal of the Royal Statistical Society - Series D (1)*
- *Journal of the Royal statistical Society- Series A (2)*
- *Journal of the Royal statistical Society- Series B (1)*
- *Mathematical Problems in Engineering(1)*
- *Journal of Time Series Analysis (3)*
- *Metron (1)*
- *Metrika (2)*
- *Neural Network World (1)*
- *Neural Processing Letters (1)*
- *OR Spectrum (1)*
- *Quality Technology and Quantitative Management (2)*
- *Pakistan Journal of Statistics (2)*
- *Sankhya (1)*
- *Scandinavian Actuarial Journal (1)*
- *Statistical Methods and Applications (2)*
- *Statistical Methodology (2)*
- *Statistical Modeling: An International Journal (8)*
- *Statistical Papers (2)*
- *Statistics(3)*
- *Statistics and Computing (9)*
- *SORT (Statistics and Operations Research Transactions) (1)*
- *Statistics and Probability Letters (4)*
- *Statistics in Medicine (5)*
- *Stochastic Environment Research (1)*

- *Transactions in Pattern Recognition and Machine Intelligence (1)*
- *Transportation Research (1)*
- *Test (4)*

15.Memberships
- Member of the American Statistical Association
- Member of the International statistical Institute
- Member of the International Biometric Society Eastern Mediterranean Region
- Member of the Greek Statistical Institute

16.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 6rd EMR-Biometrics Conference in Crete (May 2011)

17.Phd Committees
- 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 Vasilik Christou, University of Cyprus (November 2013)
- Member of the jury of the PhD of Mathieu Marback, University of Lille (July 2014)

18.Editorships
- Associate Editor for Metron journal (2007-)
- Associate Editor for Communications in Statistics (2008 -)
- Associate Editor for IMA Journal of Mathematics in Management (2009 -)
- Associate Editor for Stochastic Environmental Research and Risk Assessment (2012-)
- Editor of Biometrics Bullettin (2013-)

Other

- Reviewer για το *Zentralblat MATH* (24 reviews) .
- Reviwer for TRB, NIPS and AISTAT 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)
- Visitor, institute of Transportation, Hasselt University (February – June 2008)

19. 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)

20. 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. Poulopoulou, S. (2013) Adaptive Designs in Phase II Clinical Trials
4. Orfanogiannaki, K. (2008-) Hidden Markov models for seismicity modelling

Ongoing

1. Panagou, F. (2014-) Model based clustering for mixed mode data

MSc. Theses
Finished

1. Μπαντή Μ. (2003). Additive and Semi-parametric models for domestic water consumption
2. Ματσιούλα Α. (2004) Random Effects Models for Binary Data
3. Καλαμίδας, Γ. (2005) Statistical Modeling for football data: A Robust Approach based on Weighted Maximum Likelihood
4. Ορφανογιαννάκη Κ. (2005) Identification of seismicity patterns through Hidden Markov Models.
5. Πιτρακκου, Μ. (2005) Bayesian estimation for the Poisson-Inverse Gaussian regression model.
6. Γαβράς, Α. (2005). Μοντέλα χρονολογικών σειρών για διακριτά δεδομένα με εφαρμογή στη στατιστική ανάλυση ατυχημάτων
7. Σερμαιδης Γ. (2006) Modelling time series of counts with an application on daily car accidents
8. Ποντικας, Γ. (2006) On the identification of hazardous locations on road segments based on spatial data

9. Μητσόπουλος, Γ. (2007) Maximum Likelihood Estimation for Overdispersed Binomial and Multinomial Data through an EM Algorithm
10. Σαντουριαν, Α. (2007) Model Based Clustering With Non-Elliptically contoured Distributions
11. Δαλμάρα Α. (2008) MCMC estimation of Poisson Integer – valued Autoregressive Moving Average time series models
12. Φλάκας Γ. (2008) Exploratory Analysis, Model Selection and Checking of Structural Assumptions in Football data
13. Angelis, K. (2012) Model Based Clustering on High Dimensional Data
14. Sofronas, G. (2012) Bayesian analysis for bivariate time series models for counts
15. Oikonomopoulou, G. (2014) Statistical Modelling of Social Networks:An Application to Co-authorship data
16. Varias, A. (2014) Efficient Frontiers for counts.
17. Αλεξοπούλου, Ζ. (2014) Μέθοδοι επικύρωσης ομαδοποιήσεων
18. Καποθανάση Δ. (2014) Αδιαίρετοι σχεδιασμοί φάσης II/III

21.Papers submitted

1. Kosmidis, I. and Karlis, D. (2014) Supervised sampling for clustering large samples
2. Perrakis, K., Cools, M., Karlis, D., Janssens, D., Kochan, B. , Bellemans, T.; and Wets, G. (2014) Quantifying input-uncertainty in traffic assignment models
3. Paraschakis, K. and Karlis, D. (2014) On flexible time series models for count data
4. Orfanogiannaki, K. and Karlis, D (2014) Multivariate Poisson Hidden Markov models with a case study of modeling seismicity
5. Karlis, D, Papatla, P. and Roy, S. (2014) Peer-to-Peer Social Sampling as a Customer Acquisition Channel

22.Funding
As principal investigator

Funding	Year	Duration	Type of Program	Amount (in Euro)	Notes
Program for Basic Research 2010	2010	1 year	AUEB	5000	Expenses for basic research
Program for Basic Research 2011	2011	1 year	AUEB	5000	Expenses for basic research
Program for Basic Research Action 2	2013	1 year	AUEB	10000	Expenses for basic research for a Post-Doc student
Heraclitus, program for funding PhD students	2010	3 years	National	45000	Phd students
Heraclitus, program for funding PhD students	2010	3 years	National	12600	Phd students
Program for Bilateral Academic Exhanges	2008	Visit cost	Billateral agreement between Greece and Flanders	700	