

Dimitris Fouskakis (M.Sc., Ph.D.)

01 March 2016

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Education

B.Sc. *Mathematics*, Department of Mathematics, University of Athens, Greece. (1995).

M.Sc. *Computational Statistics*, Department of Mathematical Sciences, University of Bath, UK. (1996).

(MSc Dissertation in Statistics awarded with *Distinction*).

Ph.D. *Statistics*, Department of Mathematical Sciences, University of Bath, UK. (2001).
(dissertation advisor: Prof. David Draper)

(*University Scholarship* (full support of PhD studies), \$46,000 over 3 years).

Foreign Languages

English: Fluent

Spanish: Basic

Academic Career

09/2016 – 10/2016: Visiting Professor	Department of Statistical Sciences, Università Cattolica del Sacro Cuore, Milan, ITALY.
09/2015 – 10/2015: Visiting Professor	Department of Statistical Sciences, Università Cattolica del Sacro Cuore, Milan, ITALY.
02/2015 – current: Associate Professor	Department of Mathematics, School of Applied Mathematical and Physical Sciences, National Technical University of Athens, GREECE.
09/2014 – 10/2014: Visiting Professor	Department of Statistical Sciences, Università Cattolica del Sacro Cuore, Milan, ITALY.
04/2014 : Visitor	Department of Mathematics, University of Puerto Rico, USA.
01/2014 – 02/2014: Visiting Professor	Department of Statistical Sciences, Università Cattolica del Sacro Cuore, Milan, ITALY.
05/2009 - 01/2015: Assistant Professor (Associate Professor on the US academic scale)	Department of Mathematics, School of Applied Mathematical and Physical Sciences, National Technical University of Athens, GREECE.
04/2012 : Visitor	Department of Statistics, Wharton School, University of Pennsylvania, Philadelphia, USA.
07/2011 - 07/2012: Visiting Assistant Professor	Department of Statistics and Applied Probability, University of California, Santa Barbara, USA.
10/2004 - 04/2009: Lecturer (Assistant Professor on the US academic scale)	Department of Mathematics, School of Applied Mathematical and Physical Sciences, National Technical University of Athens, GREECE.
08/2006 : Visiting Lecturer	Department of Applied Mathematics and Statistics, Jack Baskin School of Engineering, University of California, Santa Cruz, USA.
09/2003 - 04/2004: Research Associate	Department of Hygiene and Epidemiology, University of Athens Medical School, GREECE.
09/2000 - 09/2001: Research Associate	Department of Community Based Medicine, Faculty of Medicine and Dentistry, University of Bristol, UK.

Research Interests

- Bayesian Statistics and MCMC, Stochastic Optimization Methods, Bayesian Model Selection, Bayesian Prior Elicitation & Selection, Priors for Bayesian Hypothesis Testing, Intrinsic Priors and Expected Posterior Priors, Bayesian Variable Selection, Health Policy and Health Economics, Statistical Disclosure Control, Data Confidentiality, Medical Statistics and Epidemiology.
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Teaching Interests

- Bayesian Statistics and MCMC, Mathematical Statistics, Statistical Data Analysis, Statistical Analysis using R, Biostatistics, Probability, Linear Models, Generalized Linear Models, Bayesian Model Selection, Computational Statistics.
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Additional Relevant Skills

- I am fluent in the programming environments **C++, S+, R, STATA, SPSS and WinBugs**, and moderately fluent in **Mathematica, Maple, Matlab and Minitab**.
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Consultative

- I have served as a **statistical consultant** to many private organizations, as well as to individuals, in the fields of medicine, psychology, sociology, marketing and management, during the last 15 years.
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Publications in Peered Reviewed Journals

1. **Fouskakis, D.** and Draper, D. (1999). Tabu search - book review, *Journal of the Royal Statistical Society Series D*, **48**, 616-619.
2. Draper, D. and **Fouskakis, D.** (2000). A case study of stochastic optimization in health policy: problem formulation and preliminary results. *Journal of Global Optimization*, **18**, 399-416.
3. Gunnell, D., Harrison, G., Rasmussen, F., **Fouskakis, D.** and Tynelius, P. (2002). Associations between pre-morbid intellectual performance, early-life exposures and early onset schizophrenia: a cohort study. *British Journal of Psychiatry*, **181**, 298-305.
4. **Fouskakis, D.** and Draper, D. (2002). Stochastic optimization: a review. *International Statistical Review*, **70**, 315-349.
5. Harrison, G., **Fouskakis, D.**, Rasmussen, F., Tynelius, P. and Gunnell, D. (2003). Association between psychotic disorder and urban place of birth is not mediated by

- obstetric complications or childhood socio-economic position: a cohort study. *Psychological Medicine*, **33**, 723-731.
6. Gunnell, D., Rasmussen, F., **Fouskakis, D.**, Tynelius, P. and Harrison, G. (2003). Patterns of fetal and childhood growth and the development of psychosis in young males: a cohort study. *American Journal of Epidemiology*, **158**, 291-300.
 7. **Fouskakis, D.**, Gunnell, D., Rasmussen, F., Tynelius, P., Sipos, A. and Harrison, G. (2004). Is the season of birth association with psychosis due to seasonal variations in foetal growth or other related exposures? A cohort study. *Acta Psychiatrica Scandinavica*, **109**, 1-5.
 8. Korkolis, D., Tsoli, E., **Fouskakis, D.**, Yiotis, J., Koullias, G.J., Giannopoulos, D., Papalambros, E., Patsounis, E., Asimacopoulos, P. and Gorgoulis, V.G. (2004). Tumor histology and stage but not P53, Her2-neu or Cathepsin-D expression are independent prognostic factors in breast cancer patients. *Anticancer Research*, **24**, 2061-2068.
 9. Naska, A., **Fouskakis, D.**, Oikonomou, E., Almeida, M.D.V., Berg, M.A., Gedrich, K., Moreiras, O., Nelson, M., Trygg, K., Turrini, A., Remaut, A.M., Volatier, J.L., Trichopoulou, A. and DAFNE participants (2006). Dietary patterns and their socio-demographic determinants in ten European countries. Data from the DAFNE databank. *European Journal of Clinical Nutrition*, **60**, 181-190.
 10. Kokolakis, G., Nanopoulos, Ph. and **Fouskakis, D.** (2006). Bregman divergences in the $(m \times k)$ – partitioning problem. *Computational Statistics and Data Analysis*, **51**, 668-678.
 11. Kokolakis, G. and **Fouskakis, D.** (2008). On the discrepancy measures for the optimal equal probability partitioning in Bayesian multivariate micro-aggregation. *Journal of Classification*, **25**, 209-224.
 12. **Fouskakis, D.** and Draper, D. (2008). Comparing stochastic optimization methods for variable selection in binary outcome prediction with application to health policy. *Journal of the American Statistical Association*, **103**, 1367-1381.
 13. **Fouskakis, D.**, Ntzoufras, I. and Draper, D. (2009). Bayesian variable selection using a cost-adjusted BIC, with application to cost-effective measurement of quality of health care. *Annals of Applied Statistics*, **3**, 663-690.
 14. Kokolakis, G. and **Fouskakis, D.** (2009). Importance partitioning in micro-aggregation, *Computational Statistics and Data Analysis*, **53**, 2439-2445.
 15. **Fouskakis, D.**, Ntzoufras, I. and Draper, D. (2009). Population-based reversible-jump MCMC for Bayesian variable selection and evaluation under cost-limit restrictions. *Journal of the Royal Statistical Society, Series C: Applied Statistics*, **58**, 383-403.
 16. Daskalakis, G., Simou, M., Zacharakis, D., Detorakis, S., Akrivos, N., Papantoniou, N., **Fouskakis D.** and Antsaklis, A. (2011). Impact of placenta previa on obstetric outcome. *International Journal Gynaecology and Obstetrics*, **114**, 238-241.

17. **Fouskakis, D.** (2012). Bayesian variable selection in generalized linear models using a combination of stochastic optimization methods. *European Journal of Operational Research*, **220**, 414-422.
18. Spanos, A., Theoharis, G., Karageorgopoulos, D.E., Peppas, G. and **Fouskakis, D.** (2012). Surveillance of community outbreaks of respiratory tract infections based on house-call visits in the metropolitan area of Athens, Greece. *PLoS ONE*, **7**, e40310. doi:10.1371/journal.pone.0040310.
19. **Fouskakis, D.** and Ntzoufras, I. (2013). Computation for intrinsic variable selection in normal regression models via expected-posterior prior. *Statistics and Computing*, **23**, 491-499.
20. **Fouskakis, D.**, Ntzoufras, I. and Draper, D. (2015). Power-expected-posterior priors for variable selection in Gaussian linear models. *Bayesian Analysis*, **10**, 75-107.
21. **Fouskakis, D.** and Ntzoufras, I. (2015). Power-conditional-expected priors. Using g-priors with random imaginary data for variable selection. *Journal of Computational and Graphical Statistics*, forthcoming. Available online at: <http://www.tandfonline.com/doi/abs/10.1080/10618600.2015.1036996>.
22. Charitidou, E., **Fouskakis, D.** and Ntzoufras, I. (2015). Bayesian transformation selection: Moving towards a transformed Gaussian universe. *Canadian Journal of Statistics*, **43**, 600-623.
23. **Fouskakis, D.**, Petrakos, G. and Vavouras, I. (2016). A Bayesian hierarchical model for comparative evaluation of teaching quality indicators in higher education. *Journal of Applied Statistics*, **43**, 195-211.
24. **Fouskakis, D.** and Ntzoufras, I. (2016). Limiting behavior of the Jeffreys power-expected-posterior Bayes factor in Gaussian linear models. *Brazilian Journal of Probability and Statistics*, **30**, 299-320.

Proceedings

1. **Fouskakis, D.**, Draper, D. (1998). Stochastic optimization methods for cost-effective quality assessment in health. *COMPSTAT 1998, Proceedings in Computational Statistics, Short Communications and Posters*. Harpenden: IACR-Rothamsted.
2. Charitidou, E., **Fouskakis, D.**, Ntzoufras, I. (2013). On Bayesian transformation selection: Problem formulation and preliminary results, *Proceedings of the 26th Panhellenic Statistics Conference*, 253-260.
3. Charitidou, E., **Fouskakis, D.**, Ntzoufras, I. (2014). On Bayesian transformation selection: Problem formulation and preliminary results, in Lanzarone, E. & Ieva, F. eds., *The Contribution to Young Researchers in Bayesian Statistics, Proceedings of*

BAYSM2013, Springer Proceedings in Mathematics and Statistics, Springer-Verlang, Berlin, **63**, 11-14.

4. Perrakis, K., **Fouskakis, D.**, Ntzoufras, I. (2015). Bayesian variable selection for generalized linear models using the power-conditional-expected-posterior-prior, in Frühwirth-Schnatter, S., Bitto, A., Kastner, G. & Posekany, A. eds., Bayesian Statistics from Methods to Models and Applications Proceedings of BAYSM2014, Springer Proceedings in Mathematics and Statistics, Springer-Verlang, Berlin, **126**, 59-73.

Articles Submitted / in Preparation for Peered Reviewed Journals

1. **Fouskakis, D.** and Ntzoufras I. (2016). Information consistency of the Jeffreys power-expected-posterior prior in Gaussian linear models (*we're about 95% finished with it*).
2. Perrakis, K., Ntzoufras, I. and **Fouskakis, D.** (2016). Gibbs variable selection with g-priors in generalized linear models (*we're about 70% finished with it*).
3. **Fouskakis, D.**, Ntzoufras I. and Perrakis K. (2016). Power expected posterior priors in generalized linear models (*we're about 90% finished with it*).
4. **Fouskakis, D.**, Ntzoufras I. and Perrakis K (2016). Variations of power expected posterior priors in normal regressions models (*we're about 70% finished with it*).
5. **Fouskakis, D.**, Ntzoufras I. and Pericchi, L. (2016). On using sufficient statistics in expected and power expected posterior priors for Bayesian model comparison (*we're about 90% finished with it*).
6. Telesca, D. and **Fouskakis, D.** (2015). Reference product moment priors for model determination. (*we're about 60% finished with it*).
7. **Fouskakis, D.** and Jammalamadaka, S.R. (2015). Bayesian model selection in symmetric circular data. (*we're about 50% finished with it*).

Conference Presentations

1. **Fouskakis, D.** Stochastic optimization methods for cost-effective quality assessment in health. *21st Research Students' Conference in Probability and Statistics*. Lancaster, UK, 1998.
2. **Fouskakis, D.** Stochastic optimization methods for cost-effective quality assessment in health. *Young Statisticians' Meeting 1998*. Surrey, UK, 1998.
3. **Fouskakis, D.** Stochastic optimization methods for cost-effective quality assessment in health. *Compstat 1998*. Bristol, UK, 1998.

4. **Fouskakis, D.** A case study of stochastic optimization in health policy: problem formulation and preliminary results. *6th SIAM Conference in Optimization*. Atlanta, USA, 1999.
5. **Fouskakis, D.** A case study of stochastic optimization in health policy: problem formulation and preliminary results. *International Workshop on Global Optimization*. Florence, ITALY, 1999.
6. **Fouskakis, D.** and Draper, D. Stochastic optimization methods for cost-effective quality assessment in health. *ISBA 2000*. Crete, GREECE, 2000.
7. **Fouskakis, D.** and Draper, D. Stochastic optimization methods for cost-effective quality assessment in health. *7th Valencia International Meeting on Bayesian Statistics*, Tenerife, Canary Islands, SPAIN, 2002.
8. **Fouskakis, D.** and Draper, D. Stochastic optimization methods for cost-effective quality assessment in health. *International Workshop on Bayesian Data Analysis, University of California*, Santa Cruz, USA, 2003.
9. **Fouskakis, D.** and Draper, D. Stochastic optimization methods for cost-effective quality assessment in health. *3rd EMR-IBS International Conference*, Corfu, GREECE, 2005.
10. Kokolakis, G. and **Fouskakis, D.** Importance Partitioning in Micro-Aggregation. *25th European Meeting of Statisticians*, Oslo, NORWAY, 2005.
11. **Fouskakis, D.**, Ntzoufras, I. and Draper, D. Bayesian Variable Selection using a Cost-Penalised Approach. *19th Greek Statistical Conference*. Kastoria, GREECE, 2006.
12. **Fouskakis, D.**, Ntzoufras, I. and Draper, D. Bayesian Variable Selection using a Cost-Penalised Approach. *8th Valencia-ISBA International Meeting on Bayesian Statistics*, Benidorm, SPAIN, 2006.
13. **Fouskakis, D.**, Ntzoufras, I. and Draper, D. Incorporating Cost in Bayesian Variable Selection, with application to cost-effective measurement of quality of health care. *10th Annual Winter Workshop. University of Florida, Department of Statistics. Bayesian Model Selection and Objective Methods*, Florida, USA, 2008.
14. **Fouskakis, D.**, Ntzoufras, I. and Draper, D. Incorporating Cost in Bayesian Variable Selection, with application to cost-effective measurement of quality of health care. *1st Athens – Pavia Meeting on Statistics*, Athens, GREECE, 2008.
15. **Fouskakis, D.**, Ntzoufras, I. and Draper, D. Bayesian Variable Selection using Cost-Adjusted BIC, with application to cost-effective measurement of quality of health care. *Model uncertainty*, Warwick, UK, 2010.
16. **Fouskakis, D.**, Ntzoufras, I. and Draper, D. Incorporating Cost in Bayesian Variable Selection, with application to cost-effective measurement of quality of health care. *Ninth Valencia/ISBA International Meeting on Bayesian Statistics*, Benidorm, SPAIN, 2010.

17. **Fouskakis, D.**, Ntzoufras, I. and Draper, D. Power Intrinsic Variable Selection for Normal Models based on Zellner's g-Prior: Model Formulation and Preliminary Results. *Greco Italian Meeting on Statistics*, Sardegna, ITALY, 2010.
18. **Fouskakis, D.**, Ntzoufras, I. and Draper, D., Power Intrinsic Variable Selection for Normal Models based on Zellner's g-Prior. *Greek Stochastics γ* , Crete, GREECE, 2011.
19. **Fouskakis, D.**, Ntzoufras, I. and Draper, D., Power Intrinsic Variable Selection for Normal Models based on Zellner's g-Prior. *Hierarchical Models and Markov Chain Monte Carlo, Conference in Honour of Adrian F.M. Smith*, Crete, GREECE, 2011.
20. **Fouskakis, D.**, Ntzoufras, I. and Draper, D., Power-expected-posterior priors for variable selection in Gaussian linear models. *International Workshop on Bayesian Model Selection*, Shanghai, CHINA, 2013. (**invited speaker**).
21. **Fouskakis, D.**, Ntzoufras, I. and Draper, D., Power-expected-posterior priors for variable selection in Gaussian linear models. *26th Greek Statistical Conference*. Piraeus, GREECE, 2013.
22. **Fouskakis, D.**, Ntzoufras, I. and Draper, D., Power-expected-posterior priors for variable selection in Gaussian linear models. *High-Dimensional Inference with Applications*, Kent, UK, 2013.
23. **Fouskakis, D.** and Ntzoufras, I., Power-conditional-expected priors: Using g-priors with random imaginary data for variable selection. *OBayes 2013: Celebrating 250 Years of Bayes*, Durham, USA, 2013. (**invited speaker**).
24. **Fouskakis, D.**, Ntzoufras, I. and Pericchi, L., On using Sufficient Statistics in Expected Posterior Prior for Bayesian Model Comparison. *ISBA 2014*, Cancún, MEXICO, 2014. (**invited speaker**).
25. **Fouskakis, D.**, Discussion on "False Discovery Rate Smoothing", *OBayes 2015*, Valencia, SPAIN, 2015. (**invited discussant**).
26. **Fouskakis, D.**, Ntzoufras, I. and Pericchi, L., On using Sufficient Statistics in Expected Posterior Prior for Bayesian Model Comparison. *3rd Meeting on Statistics*, Athens, GREECE, 2015.
27. **Fouskakis, D.**, Ntzoufras, I. and Charitidou, E., Bayesian Transformation Selection. *ISBA 2016*, Sardinia, ITALY, 2016.

Books, Manuscripts and other Publications

1. **Fouskakis, D.** (1996). *Variable Selection via Hierarchical Modeling and Utility*. M.Sc. Dissertation (with distinction), Department of Mathematical Sciences, University of Bath, UK.

2. **Fouskakis, D.** (2001). *Stochastic Optimisation Methods for Cost-Effective Quality Assessment in Health*. Ph.D. Thesis, Department of Mathematical Sciences, University of Bath, UK.
 3. Kokolakis, G. and **Fouskakis, D.** (2005). *Notes in Statistics*. (196 pages). National Technical University of Athens. Athens, Greece. (in Greek).
 4. Kokolakis, G. and **Fouskakis, D.** (2009). *Statistical Theory & Applications*. (370 pages). Symeon. Athens, Greece. (in Greek).
 5. **Fouskakis, D.** (2013). *Data Analysis using R*. (504 pages). Tsotras, Athens, Greece. (in Greek).
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Citations

697 (Scopus, 01/03/2016)

Details in Scholar Google

<http://scholar.google.gr/citations?user=9cCOprsAAAAJ>

Invited Lectures

1. **Paradoxes in Probability Theory and Statistics**. Special event for the 15 years of the School of Applied Mathematical and Physical Sciences, National Technical University of Athens, Athens, GREECE, April 2015.
2. **Quantifying Uncertainty – An Introduction to Bayesian Statistics**. TEDxNTUA, Athens, GREECE, January 2015.
3. **Paradoxes in Probability Theory and Statistics**. Special event for the 170 years of the National Technical University of Athens. Department of Mathematics, National Technical University of Athens, Athens, GREECE, December 2007.
4. **Statistical Analysis for the DAFNE dataset**. Department of Hygiene and Epidemiology, University of Athens Medical School, Athens, GREECE, October 2003.
5. **Introduction to Statistics**. *MRCPsych Part II*. Department of Community Based Medicine, Faculty of Medicine and Dentistry, University of Bristol, UK, May 2001.
6. **Why Statistics? Foundations**. *Critical Appraisal and Research Methods: A 3 day course*. Department of Community Based Medicine, Faculty of Medicine and Dentistry, University of Bristol, UK, March 2001.
7. **Hypothesis Testing and Confidence Intervals**. *Critical Appraisal and Research Methods: A 3 day course*. Department of Community Based Medicine, Faculty of Medicine and Dentistry, University of Bristol, UK, March 2001.

- 8. How can cohort studies help us to identify risk factors for schizophrenia?**
Department of Community Based Medicine, Faculty of Medicine and Dentistry,
University of Bristol, UK, September 2000.
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Invited Talks

- 1. 8 October 2015**, “A Review of Bayesian Variable Selection Methods and an Introduction to the Power-Expected-Posterior Prior Methodology”. Institute of Data Science, Università della Svizzera italiana, USI, Lugano, SWITZERLAND.
 - 2. 23 January 2014**, “Power-Conditional-Expected-Priors: Using g-priors with Random Imaginary Data for Variable Selection”. Department of Economics and Management, University of Pavia, ITALY.
 - 3. 17 January 2014**, “Power-Conditional-Expected-Priors: Using g-priors with Random Imaginary Data for Variable Selection”. Department of Statistics, Università Cattolica del Sacro Cuore, Milan, ITALY.
 - 4. 28 September, 2012**, “Bayesian Variable Selection in Generalised Linear Models using a Combination of Stochastic Optimization Methods”, Southampton Statistical Sciences Research Institute, University of Southampton, UK.
 - 5. 4 June, 2012**, “Power-Expected-Posterior Priors for Variable Selection in Gaussian Linear Models”, Department of Statistics, University of California, Irvine, USA.
 - 6. 28 March 2012**, “Power-Intrinsic Bayesian Variable Selection in Gaussian Linear Models”, Statistics Department, Wharton School, University of Pennsylvania, USA.
 - 7. 18 January, 2012**, “Power Intrinsic Variable Selection for Normal Models based on Zellner’s g-Prior”, Department of Biostatistics, University of California, Los Angeles, USA.
 - 8. 2 December, 2011**, “Power Intrinsic Variable Selection for Normal Models based on Zellner’s g-Prior”, Department of Applied Mathematics and Statistics, University of California, Santa Cruz, USA.
 - 9. 12 October 2011**, “Power Intrinsic Variable Selection for Normal Models based on Zellner’s g-Prior”, Department of Statistics and Applied Probability, University of California, Santa Barbara, USA.
 - 10. 22 February 2011**, “Can someone help me define intrinsic please?”, Department of Statistics, Athens University of Economics and Business, Athens, Greece.
 - 11. 2 June 2010**, “Power Intrinsic Variable Selection for Normal Models based on Zellner’s g-Prior: Model Formulation and Preliminary Results, School of Mathematical Sciences, University of Bath, UK.
 - 12. 23 September 2009**, “Incorporating Cost in Bayesian Variable Selection with Application to Cost-Effective measurement of Quality of Health Care”, School of Mathematical and Computer Sciences, Heriot-Watt University, UK.
 - 13. 23 January 2004**, “Stochastic Optimization Methods for Cost-Effective Quality Assessment in Health”, Department of Statistics and Actuarial – Financial Mathematics, University of Aegean, Samos, Greece.
 - 14. 24 September 2003**, “Stochastic Optimization Methods for Cost-Effective Quality Assessment in Health”, Department of Mathematics, School of Applied Mathematical and Physical Sciences, National Technical University of Athens.
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Organization of Conferences – Short Courses

Member of the Organizing and Scientific Committees of the following International Conferences and Short Courses.

1. **Third Meeting on Statistics**, Athens, Greece, June 2015.
 2. **Summer School in Bayesian Modeling and Variable Selection using WinBUGS**, Athens, Greece, June 2015.
 3. **Workshop on Bayesian Modeling using WinBUGS**, Athens, Greece, 2010.
 4. **1st Athens – Pavia Meeting on Statistics**, Athens, Greece, 2008.
 5. **Compstat 1998**. Bristol, UK, 1998.
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Short Courses – Invited Lecturer

1. **Spring Course on R**, Athens University of Economics and Business, Athens, Greece, March 2015 (*Invited Lecturer*).
 2. **Summer School on R**, Athens University of Economics and Business, Athens, Greece, June 2014 (*Invited Lecturer*).
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Funded European and National Research Projects

Principal Investigator in the following research projects:

1. **Bayesian methods for the evaluation of structural properties of statistical models**. National Technical University of Athens. PEVE 2010. January 2011. Duration: 24 months.

Research Member in the following research projects:

Bayesian Variable Selection using Power-Expected-Priors. Aristeia II Program. January 2014. Duration: 18 months.

Random Probability Measures. National Technical University of Athens. Caratheodoris Program. February 2007. Duration: 18 months.

Funded Training Programs

Statistical and Computational Modeling Approaches for Engineers, using Computer Packages. “Training for Engineers in Information and Communication Technologies”. Training Program, May 2009.

Project Contracts

Methodological help-desk support and communication. *Agilis S.A. Statistics and Informatics.* February 2013.

Quality improvements of regional aggregates. *Agilis A.E. Στατιστικής και Πληροφορικής.* February 2014.

Supervision of Dissertations - M.Sc. Projects and Ph.D. Theses

(a) Last Year Undergraduate Dissertations

1. *Genetic Algorithm for the Variable Selection Problem*, School of Applied Mathematical and Physical Sciences, Department of Mathematics, National Technical University of Athens (2015). By E. Mpaltzoglou.
2. *Statistical Analysis for Predicting Emissions of Greenhouse Gases in the European Union*, School of Applied Mathematical and Physical Sciences, Department of Mathematics, National Technical University of Athens (2015). By M. Demetriadou.
3. *Statistical Analysis of Unemployment Data Using R*, School of Applied Mathematical and Physical Sciences, Department of Mathematics, National Technical University of Athens (2015). By K. Ramadani.
4. *Statistical Analysis of Circular Data*. School of Applied Mathematical and Physical Sciences, Department of Mathematics, National Technical University of Athens (2014). By E. Liapikos.
5. *Household Budget Survey Statistical Analysis*. School of Applied Mathematical and Physical Sciences, Department of Mathematics, National Technical University of Athens (2014). By P. Kasidokosta.
6. *Statistical Analysis of Acinetobacter baumannii Infections*. School of Applied Mathematical and Physical Sciences, Department of Mathematics, National Technical University of Athens (2014). By K. Manousou.
7. *A Random Coefficient Model for Teaching Evaluation*. School of Applied Mathematical and Physical Sciences, Department of Mathematics, National Technical University of Athens (2014). By D. Photiou.
8. *Generalised Linear Models with Applications in R*. School of Applied Mathematical and Physical Sciences, Department of Mathematics, National Technical University of Athens (2013). By M. Panagiotopoulou.

9. *Stochastic Simulation using MCMC*. School of Applied Mathematical and Physical Sciences, Department of Mathematics, National Technical University of Athens (2013). By E. Tapiri.
10. *Hierarchical Models and Applications*. School of Applied Mathematical and Physical Sciences, Department of Mathematics, National Technical University of Athens (2013). By M. Batsiou.
11. *Monte Carlo Simulation*. School of Applied Mathematical and Physical Sciences, Department of Mathematics, National Technical University of Athens (2012). By G. Kentas.
12. *Sample Selection and Qualitative Analysis for the European Study EU-SILC*. School of Applied Mathematical and Physical Sciences, Department of Mathematics, National Technical University of Athens (2011). By A. Kazatzi.
13. *Density Estimation*. School of Applied Mathematical and Physical Sciences, Department of Mathematics, National Technical University of Athens (2011). By M. Petropoulou.
14. *Model Selection Criteria*. School of Applied Mathematical and Physical Sciences, Department of Mathematics, National Technical University of Athens (2010). By G. Kozyrakis.
15. *Evaluation of the ability of existing statistical methods to recognize epidemic observations of cases of upper and lower respiratory infections among the population*. School of Applied Mathematical and Physical Sciences, Department of Mathematics, National Technical University of Athens (2010). By A. Spanos.
16. *Models for analyzing football data*. School of Applied Mathematical and Physical Sciences, Department of Mathematics, National Technical University of Athens (2010). By I. Chatziraptis.
17. *Statistical analyses of categorical data*. School of Applied Mathematical and Physical Sciences, Department of Mathematics, National Technical University of Athens (2010). By M. Parrakis.
18. *Statistical analysis of the way Greek doctors approaching the infections of the respiratory system*. School of Applied Mathematical and Physical Sciences, Department of Mathematics, National Technical University of Athens (2008). By N. Vakeroudi.
19. *MCMC algorithms in the Bayesian statistics*. School of Applied Mathematical and Physical Sciences, Department of Mathematics, National Technical University of Athens (2008). By T. Bilinis.
20. *On modeling soccer data*. School of Applied Mathematical and Physical Sciences, Department of Mathematics, National Technical University of Athens (2008). By M. Georgoulakos.
21. *Multivariate statistical methods for gene data*. School of Applied Mathematical and Physical Sciences, Department of Mathematics, National Technical University of Athens (2008). By E. Charitidou.
22. *The bootstrap and its applications*. School of Applied Mathematical and Physical Sciences, Department of Mathematics, National Technical University of Athens (2007). By T. Kiparissidis.

23. *Biostatistics and epidemiology with applications*. School of Applied Mathematical and Physical Sciences, Department of Mathematics, National Technical University of Athens (2007). By E. Androulakis.

24. *Introduction to the Bayesian statistics, comparison with the frequentist and MCMC*. School of Applied Mathematical and Physical Sciences, Department of Mathematics, National Technical University of Athens (2007). By I. Ligkas.

(b) M.Sc. Projects

1. *Bayesian model and variable selection in generalized linear models and applications of the MC³ algorithm*. School of Applied Mathematical and Physical Sciences, Department of Mathematics, National Technical University of Athens (2010). By I. Dedakis.

2. *EM algorithm*. School of Applied Mathematical and Physical Sciences, Department of Mathematics, National Technical University of Athens (2010). By V. Moutsana.

3. *Bayesian variable selection in generalized linear models and applications of the automatic RJMCMC*. School of Applied Mathematical and Physical Sciences, Department of Mathematics, National Technical University of Athens (2010). By N. Nanouris.

4. *Bayesian model averaging*. School of Applied Mathematical and Physical Sciences, Department of Mathematics. National Technical University of Athens (2010). By S. Marakas.

5. *Stochastic optimization methods for the optimal partitioning problem of continuous multivariate data*. School of Electrical and Computer Engineering, National Technical University of Athens (2007). By G. Karkalatos.

(c) Ph.D. Theses

1. *Bayesian methods for the evaluation of structural properties of statistical models*. School of Applied Mathematical and Physical Sciences, Department of Mathematics, National Technical University of Athens (*in progress*). By E. Charitidou.

Teaching Experience

(a) Postgraduate Courses

1. **M.Sc. in Applied Mathematical Sciences**, School of Applied Mathematical and Physical Sciences, Department of Mathematics, National Technical University of Athens:

a. *Bayesian Statistics and MCMC*.

b. *Computational Statistics and Stochastic Simulation*.

2. **M.Sc. in Professional and Environmental Health, Management and Economic Evaluation**, Medical School of Athens:
 - a. *Medical Statistics.*
3. **MBA in Techno-Economic Systems**, School of Electrical and Computer Engineering National Technical University of Athens:
 - a. *Probability Theory and Statistics.*
4. **Postgraduate Seminars in Psychosocial Rehabilitation - Psychosocial Therapeutic Procedures**, University Mental Health Research Institute, Athens:
 - a. *Introduction to Statistics.*
5. **MBA**, Hellenic Open University:
 - a. *Advanced Quantitative Methods for Managers.*

(b) Undergraduate Courses

1. **Department of Mathematics**, School of Applied Mathematical and Physical Sciences, National Technical University of Athens:
 - a. *Probability.*
 - b. *Mathematical Statistics.*
 - c. *Data Analysis.*
 - d. *Computational Statistics.*
2. **School of Civil Engineering**, National Technical University of Athens:
 - a. *Probability and Statistics*
3. **School of Electrical and Computer Engineering**, National Technical University of Athens:
 - a. *Probability Theory and Statistics.*
4. **School of Rural and Surveying Engineering**, National Technical University of Athens:
 - a. *Probability Theory and Statistics. Marine Environment Applications.*
5. **Department of Applied Mathematics and Statistics**, Jack Baskin School of Engineering, University of California at Santa Cruz:
 - a. *Statistics.*
6. **Department of Statistics and Applied Probability**, University of California at Santa Barbara:
 - a. *Probability and Statistics.*
 - b. *Statistics.*
 - c. *Statistics for Life Sciences.*

7. **Department of Statistical Sciences, Università Cattolica del Sacro Cuore, Milan:**

- a. *Statistics.*
 - b. *Applied Statistics*
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University Service

- **2015 – current:** Head of the Institute of Statistics, National Technical University of Athens.
- **2013 – current:** Member of the committee that is responsible for the acceptance of equipments, supplies and service providers, National Technical University of Athens.
- **2013 – :** Member of the committee that is responsible for the execution, evaluation, monitoring and acceptance of hardware and software supplies, National Technical University of Athens.
- **2010 – 2012:** Full member of the committee that is responsible for the conduction and evaluation of informal tenders, School of Applied Mathematical and Physical Sciences, National Technical University of Athens.
- **2010 – 2011:** Full member of the research and finance committee, School of Applied Mathematical and Physical Sciences, National Technical University of Athens.
- **2005:** Full member of the committee that conducted matriculation exams.
- **2006 – current:** Student internship coordinator, Department of Mathematics, School of Applied Mathematical and Physical Sciences, National Technical University of Athens.
- **2006 – 2009:** Member of the committee responsible for the Ch. Papakyriakopoulos' legacy, Department of Mathematics, School of Applied Mathematical and Physical Sciences, National Technical University of Athens.
- **2006 – 2009:** Member of the scientific program committee of the MSc course “Logic, Algorithms and Computation”, University of Athens.
- **2005 – current:** Member of the committee that conducted graduate admission exams for the School of Mechanical Engineering, National Technical University of Athens.
- **2007 – current:** Member of the committee that is responsible for the conduction of graduate admission exams for the School of Applied Mathematical and Physical Sciences, National Technical University of Athens.
- **2007:** Member of the committee that was responsible for the presentation of the Department of Mathematics, during the celebration of the 170 years of the National Technical University of Athens.
- **2007:** Member of the committee that conducted a research “What are our graduates doing now?”. I was responsible for conducting the statistical analysis of the given questionnaire and for writing the final technical report.
- **2007 - current:** Member of the committee that is responsible for the postgraduate studies of the Department of Mathematics, School of Applied Mathematical and Physical Sciences, National Technical University of Athens.

- **2010 - 2011:** Member of the committee that was responsible for the undergraduate studies of the Department of Mathematics, School of Applied Mathematical and Physical Sciences, National Technical University of Athens.
 - **2010 – 2012:** Member of the finance committee, Department of Mathematics, School of Applied Mathematical and Physical Sciences, National Technical University of Athens.
 - **2010 -current:** Member of the committee that is responsible for creating a Mathematical Research Center, Department of Mathematics, School of Applied Mathematical and Physical Sciences, National Technical University of Athens.
 - **2006 – 2009, 2010 – 2011, 2013:** Member of the faculty school meetings, School of Applied Mathematical and Physical Sciences, National Technical University of Athens.
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Honors and Awards

- Nominated to stand for the election as candidate for the *International Society for Bayesian Analysis* Board of Directors (2015).
 - Nominated of treasurer of the OBayes Section of the *International Society for Bayesian Analysis* (2015).
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Scientific Societies Membership

- Member of the *Greek Statistical Institute*.
 - Member of the *American Statistical Association*.
 - Member of the *International Society for Bayesian Analysis*.
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Refereeing

- *Evolutionary Computation Journal*.
- *Statistics in Medicine*.
- *Journal of American Statistical Association*.
- *Computational Statistics and Data Analysis*.
- *Optimization and Engineering*.
- *Statistics in Computing*.
- *Statistics and Probability Letters*.

- *RACSAM - Revista de la Real Academia de Ciencias Exactas, Físicas y Naturales. Serie A. Matemáticas.*
 - *Advances in Data Analysis and Classification.*
 - *Methods in Ecology and Evolution.*
 - *Test.*
 - *Journal of Applied Statistics.*
 - *Scandinavian Journal of Statistics.*
 - *Stochastic Environmental Research and Risk Assessment.*
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