

## Dr Nikolaos Kourentzes

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Nationality	Greek

## Education

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10/2006 – 12/2009	PhD in Management Science, Department of Management Science, Lancaster University Management School, Lancaster University, UK
Topic	Input variable selection for time series forecasting with artificial neural networks – an empirical evaluation across varying time series frequencies.
Awards	Full scholarship from Lancaster University and Greek State Scholarship Foundation (IKY). Kingsman Prize 2009 for best PhD in Management Science in Lancaster University.
09/2005 – 09/2006	MSc in Operational Research, Department of Management Science, Lancaster University Management School, Lancaster University, Lancaster, UK
Grade	76 out of 100 (Distinction)
Awards	Full scholarship from Greek State Scholarship Foundation (IKY).
10/2004 – 09/2006	Ptychion (Part-time - 4-Year Degree) in Informatics & Telecommunications, Department of Computer Science, National & Kapodistrian Athens University of Athens, Greece
	Selected mathematics and statistics modules only – not full degree.
10/2000 – 10/2004	Ptychion (4-Year Degree) in Business Administration, Athens University of Economics and Business, Athens, Greece
Grade	8.63 out of 10 (Distinction – Top 1%)
Awards	Greek State Scholarships Foundation (IKY) Award (top 1% in the department). Chalkiopolou Foundation Award (top 1% in the university).
1995 – 2000	Secondary education: 1 <sup>st</sup> Lyceum of Amarousion, Athens, Greece
Grade	18.8 out of 20 (Distinction – Top 5%)

## Academic Positions

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07/2015-Today	Associate Professor (Senior Lecturer) - Management Science. Department of Management Science, Lancaster University Management School
Main activities and responsibilities	Forecasting and Marketing Analytics research. Postgraduate and undergraduate teaching. Applied academic research with companies and executive training courses.
09/2011-07/2015	Assistant Professor (Lecturer) - Management Science. Department of Management Science, Lancaster University Management School
Main activities and responsibilities	Forecasting and Marketing Analytics research. Postgraduate and undergraduate teaching. Applied academic research with companies and executive training courses
10/2009-09/2011	Post-Doctorate Research Associate. Department of Management Science, Lancaster University Management School
Main activities and responsibilities	Forecasting and statistics postdoctoral research. Teach undergraduate, postgraduate and executive courses on forecasting, data mining and credit scoring.
10/2006-Today	Research Associate. Lancaster Centre for Forecasting, Lancaster University Management School
Main activities and responsibilities	Applied academic research, consultancy and executive training courses with major consumer goods and utilities organisations, such as Bayer, Beiersdorf, Dong, ITV, Sanofi among others.
09/2001-09/2004	Part-time research assistant. Department of Business Administration, Athens University of Economics and Business
Main activities and responsibilities	Organisation of the annual 3-day seminars at Delphi and the 2-days Career Show in the University. Managed computer support teams, PR with invited speakers and scheduling.

## Publications

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### Journal Papers

- F. Petropoulos, N. Kourentzes, K. Nikolopoulos, 2016, Another look at estimators for intermittent demand. *International Journal of Production Economics*.
- D. K. Barrow, N. Kourentzes, 2016, Distributions of forecasting errors of forecast combinations: implications for inventory management. *International Journal of Production Economics*.
- N. Kourentzes, F. Petropoulos, 2015, Forecasting with multivariate temporal aggregation: The case of promotional modelling. *International Journal of Production Economics*.
- J. R. Trapero, N. Kourentzes, Martin, A., 2015, Short-term solar irradiation forecasting based on dynamic harmonic regression. *Energy*, 84, 289-295.
- F. Petropoulos, N. Kourentzes, 2014, Improving forecasting via multiple temporal aggregation. *Foresight: The International Journal of Applied Forecasting*, 34: 12-17.
- N. Kourentzes, 2014, On intermittent demand model optimisation and selection, *International Journal of Production Economics*, 156: 180-190.
- F. Petropoulos, N. Kourentzes, 2014, Forecast combinations for intermittent demand, *Journal of Operational Research Society*, 66: 914-924.
- J. R. Trapero, N. Kourentzes, R. Fildes, 2014, On the identification of sales forecasting models in the presence of promotions, *Journal of Operational Research Society*, Forthcoming.
- N. Kourentzes, F. Petropoulos, J. R. Trapero, 2014, Improving forecasting by estimating time series structural components across multiple frequencies, *International Journal of Forecasting*, 30: 291-302.
- N. Kourentzes, D. K. Barrow, S. F. Crone, 2014, Neural Network Ensemble Operators for Time Series Forecasting, *Expert Systems with Applications*, 41: 4236-4244.
- N. Kourentzes, 2013, Intermittent Demand Forecasts with Neural Networks, *International Journal of Production Economics*, 143: 198-206.
- J. R. Trapero, D. J. Pedregal, R. Fildes, N. Kourentzes, 2013, Analysis of judgmental adjustments in the presence of promotions, *International Journal of Forecasting*, 29: 234-243.
- J. R. Trapero, N. Kourentzes, R. Fildes, 2012, Impact of Information Exchange on Supplier Forecasting Performance, *OMEGA*, 40: 738-747.
- R. Fildes and N. Kourentzes, 2011, Validation in models of climate change and forecasting accuracy, *International Journal of Forecasting*, 27: 968-995.
- R. Fildes and N. Kourentzes, 2011, Validation in models of climate change and forecasting accuracy: Postscript, *International Journal of Forecasting*, 27: 1004-1005.
- S. F. Crone and N. Kourentzes, 2010, Feature selection for time series prediction – A combined filter and wrapper approach for neural networks, *Neurocomputing*, 73: 1923-1936.

### Refereed Conference Publications (Selection)

- J. R. Trapero, F. P. Garc, N. Kourentzes, 2014, Impact of Demand Nature on the Bullwhip Effect. Bridging the Gap between Theoretical and Empirical Research, *Proceedings of the Seventh International Conference on Management Science and Engineering Management*, 2014, 1127-1137.
- N. Kourentzes, Data driven fitting sample selection for time series forecasting with neural networks, *International Joint Conference on Neural Networks*, Brisbane, 10-15 June 2012.
- N. Kourentzes, Modelling functional outliers for high frequency time series forecasting with neural networks: an empirical evaluation for electricity load data, *2011 International Conference on Data Mining, DMIN'2011*, Las Vegas, 18-21 July 2011.
- S. F. Crone and N. Kourentzes, Segmenting electrical load time series for forecasting? An empirical evaluation of daily UK load patterns, *International Joint Conference on Neural Networks*, San Jose, 31-05 August 2011.
- N. Kourentzes and S. F. Crone, Semi-supervised monitoring of electric load time series for unusual patterns, *International Joint Conference on Neural Networks*, San Jose, 31-05 August 2011.
- A. Panaretou and N. Kourentzes, The value of corporate risk management: Is predictive modelling possible?, *the 34<sup>th</sup> Annual Congress of European Accounting Association*, EAA 2011, Rome, Italy, 20-22 April 2011.
- N. Kourentzes and S. F. Crone, Frequency independent automatic input variable selection for neural networks for forecasting, *International Joint Conference on Neural Networks*, Barcelona, Spain, 18-23 July 2010.
- S. F. Crone and N. Kourentzes, Naive Support Vector Regression and Multilayer Perceptron Benchmarks for the 2010 Neural Network Grand Competition (NNGC) on Time Series Prediction, *International Joint Conference on Neural Networks*, Barcelona, Spain, 18-23 July 2010.
- S. F. Crone and N. Kourentzes, 2009, Forecasting Seasonal Time Series with Multilayer Perceptrons – an Empirical Evaluation of Input Vector Specifications for Deterministic Seasonality, *Proceedings of the 2009 International Conference on Data Mining, DMIN'09*, Las Vegas, USA, CSREA, pp. 232-238.
- S. F. Crone and N. Kourentzes, 2009, Input-variable Specification for Neural Networks - an Analysis of Forecasting low and high Time Series Frequency, *Proceedings of the International*

Joint Conference on Neural Networks, IJCNN'09, Atlanta, USA, IEEE: New York, pp. 3221-3228.

N. Kourentzes and S. F. Crone, 2008, Automatic modelling of neural networks for time series prediction – in search of a uniform methodology across varying time frequencies, Proceedings of the 2nd European Symposium on Time Series Prediction, ESTSP'08, Helsinki, Finland.

S. F. Crone and N. Kourentzes, 2008, Forecasting high-frequency time series with Neural Networks - an analysis of modelling challenges from increasing data frequency, Proceedings of the International Conference on Data Mining, DMIN'08, Las Vegas, USA, CSREA, pp.37-42.

S. F. Crone and N. Kourentzes, 2007, Input variable selection for time series prediction with neural networks-an evaluation of visual, autocorrelation and spectral analysis for varying seasonality, Proceedings of the 1st European Symposium on Time Series Prediction, ESTSP'07, Helsinki, Finland.

Working Papers

Forecasting Using Temporal Hierarchies, with G. Athanasopoulos, R. Hyndman and F. Petropoulos. Aimed at Management Science.

Duality in Time Series Hierarchical Forecasting, with F. Petropoulos and A. Syntetos. Aimed at Management Science.

Identifying multiplicative seasonality for model selection, with C. Diaz. Aimed at International Journal of Forecasting.

Variance Regularised Optimisation for Exponential Smoothing, with K. Kaparis. Aimed at International Journal of Forecasting.

Segmenting electrical load time series for forecasting? An empirical evaluation of daily UK load patterns, with S. F. Crone. Aimed at European Journal of Operation Research.

The value of corporate risk management: Is predictive modelling possible? With A. Panaretou. Aimed at Journal of Empirical Finance.

**Selected Conference Presentations**

International Symposium on Forecasting (ISF)	Years: 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2106
European Symposium on Time Series Prediction (ESTSP)	Years: 2007, 2008
International Conference on Data Mining (DMIN)	Years: 2008, 2009, 2010, 2011
International Joint Conference on Neural Networks (IJCNN)	Years: 2009, 2010, 2011, 2012
Annual Congress of European Accounting Association (EAA)	Years: 2011
Institute of Business Forecasting & Planning	Years: 2011, 2012
European Conference on Operational Research (EURO)	Years: 2013, 2015
International Society for Inventory Research Conference (ISIR)	Years: 2014, 2016

**Conference Organisation**

International Conference on Data Mining (DMIN)	2011	Programme Chair
International Conference on Data Mining (DMIN)	2010, 2011	Student Chair

**Research Grants**

2011	£4,500, University Small Grants Scheme, Lancaster University Investigating non-linearities in the effects of hedging on firm value to facilitate decision making.
2011	\$4,000, SAS-IIF Grant Minimizing the gap between judgemental and statistical forecasting in the presence of promotions.
2012	£6,700, University Early Career Grant, Lancaster University Regularised exponential smoothing models for time series forecasting business operations.
2013	£3,978, University Small Grants Scheme, Lancaster University Modelling the effect of promotions on future demand across supply chain levels.
2013	£4,955, University Small Grants Scheme, Lancaster University Improving forecasting by estimation of time series structural components across multiple sampling frequencies.
2014	£5,000, University Small Grants Scheme, Lancaster University Judgmental model selection for time series.
2015	£3,831, LUMS Collaborative Writing Awards, Lancaster University Management School Reconciling strategic, tactical and operational forecasting and decision making using temporal hierarchies

## Selected Applied Academic Research Projects

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2013-2014 Details	BskyB, London, UK Forecasting process benchmarking and reengineering.
2011-2012 Details	DONG Energy, Copenhagen, Denmark Provide expert support on time series modelling for high frequency electricity and gas load data with application to energy pricing models.
2011 Details	BT, Ipswich, UK Provide expert support to forecasting slow moving items for network repairs and installations for new customers with applications to inventory management optimisation.
2010-Today Details	Sanofi-Aventis, Surrey, UK Provide time series analysis and classification of SKUs by market importance and behaviour, forecasting model selection for operational forecasting, support integration of judgemental information on the forecasting process and evaluate collaborative forecasting.
2010 Details	SAF AG, Tägerwilen, Switzerland Analyse and develop advanced time series forecasting models analysis for supply chain and demand planning applications.
2009-2010 Details	Retail Express, Leeds, UK Market intelligence modelling with neural network forecasting models. Develop statistical inference framework for neural networks with application to retail and promotional time series modelling for supporting inventory and marketing mix decisions.
2008-Today Details	Beiersdorf AG, Hamburg, Germany Model selection and novel parameter selection methodology for exponential smoothing methods with application to demand planning automation and inventory optimisation.
2007-2008 Details	SMD Holdings Ltd, Preston, UK Develop novel statistical new product forecasting methodology, define forecasting hierarchies, benchmark statistical forecasting methodologies to improve and automate existing demand planning process and inventory management.
2006 Details	ITV Plc, London, UK Provide market intelligence for television viewership data, using statistical exploration and time series clustering. Develop novel statistical data exploration tools. Automatically specify forecasting hierarchies and develop statistical benchmarks to evaluate current forecasting process.

## Academic Teaching

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EBIN 510: E-Marketing Details	Postgraduate management science course in Lancaster University. Lectures and tutorials. Developed new course material.
Years	2012-2013
MSCI 582: : Marketing Analysis and Modelling Details	Postgraduate management science course in Lancaster University. Lectures and tutorials. Developed new course material.
Years	2011-2012, 2012-, 2013-2014, 2014-2015, 2015-2016
MSCI 581: Introduction to Management Science and Marketing Analytics Details	Postgraduate management science course in Lancaster University. Lectures and tutorials. Developed new course material.
Years	2011-2012, 2012-2013, 2013-2014, 2014-2015, 2015-2016
MSCI 381: Demand Forecasting and Revenue Management Details	Undergraduate management science course in Lancaster University. Lectures and tutorials for the Demand Forecasting part since 2009. Developed new course material. Tutorials and partial teaching of lectures before.
Years	2007-2008, 2008-2009, 2009-2010, 2010-2011, 2011-2012, 2012-2013, 2013-2014, 2014-2015, 2015-2016
MSCI 543: Marketing Analysis and Modelling	

Details	Postgraduate management science course in Lancaster University. Lectures and tutorials. Developed new course material.
Years	2009-2010, 2011-2012
MSCI 523: Forecasting Module	
Details	Postgraduate management science course in Lancaster University. Tutorials and partial teaching of lectures.
Years	2007-2008, 2008-2009, 2009-2010
MSCI 524: Credit Scoring	
Details	Postgraduate management science course in Lancaster University. Tutorials and partial teaching of lectures.
Years	2009-2010
MSCI 331: Data Mining	
Details	Undergraduate management science course in Lancaster University. Tutorials and partial teaching of lectures.
Years	2008-2009, 2009-2010
Principles of Computers and Information Systems	
Details	Undergraduate course in Athens University of Economics & Business. Tutorials on advanced topics of Microsoft Office, databases and VBA.
Years	2000-2001, 2001-2002, 2002-2003, 2003-2004

## Executive Teaching

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2016 Details	Lancaster Centre for Forecasting: Statistical Demand Planning Course with SAP-APO DP. Design and deliver 2-day forecasting workshop for British Gypsum (UK)
2013 Details	Lancaster Centre for Forecasting: Statistical Demand Planning Course. Design and deliver 2-day forecasting workshop for BskyB (UK).
2013-Today Details	Lancaster Centre for Forecasting: Advanced Forecasting Courses on Slow Moving Items and Intermittent Demand Teach 1-day forecasting workshop for practitioners.
2012 Details	Lancaster Centre for Forecasting: Inventory Management Course Design and deliver 1-day inventory management workshop for Bayer (Germany).
2011 Details	Lancaster Centre for Forecasting: Advanced Forecasting Course Design and deliver 3-day advanced forecasting workshop for DONG Energy (Denmark).
2011 Details	Lancaster Centre for Forecasting: Advanced Forecasting Course Design and deliver 2-day advanced forecasting workshop for Bayer Cropscience (Germany).
2010 Details	Lancaster Centre for Forecasting: Advanced Forecasting Course Organise and teach two 2-day advanced forecasting workshops for the Home Office and Ministry of Justice.
2009 Details	Lancaster Centre for Forecasting: Neural Networks for forecasting Course Three day neural network forecasting workshop for practitioners.
2008-Today Details	Lancaster Centre for Forecasting: SAP APO-DP courses Teach SAP APO-DP forecasting workshops tailored to the needs of specific companies. Past companies include Celanese (USA) 2 workshops, Beiersdorf (Germany) 7 workshops and Beiersdorf (Brazil) 1 workshop.
2006-Today Details	Lancaster Centre for Forecasting: Forecasting Fundamentals Teach 2-day forecasting workshops for practitioners (15 workshops). Since 2009 I have course director responsibilities.

## Professional Associations

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2011-Today	European Institute for Advanced Studies in Management (EIASM) - Member
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Details	The European Institute for Advanced Studies in Management is an international network for management research and teaching.
2010-Today	Ingenium Research Group - Member
Details	A multidisciplinary research group comprising members in the fields of engineering, business administration and economics, and the pursuit of excellence in research.
2009-Today	International Neural Network Society (INNS) – Member
Details	The International Neural Network Society premiere organization for individuals interested in a theoretical and computational understanding of neural networks.
2008-Today	International Institute of Forecasters (IIF) – Member
Details	The International Institute of Forecasters is the preeminent organization for scholars and practitioners in the field of forecasting.

## Skills

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Languages	Greek (Native Language) English (Fluent – Cambridge Proficiency) French (Beginner) German (Beginner) Spanish (Beginner)
Research Skills	Business forecasting, econometric model building, machine learning, intermittent demand modelling, new product forecasting, promotional modelling, clustering, classification, dimensionality reduction
Computer skills and competences	MATLAB, R, SAS enterprise miner, SAP APO-DP, SPSS, Forecast Pro, AutoBox, LINDO, SQL, Visual Basic for Applications (VBA), C++, Micro Saint Sharp, MS Office (Word, Excel, PowerPoint, Visio), LaTeX, HTML editing, Windows, Linux, High Performance Computing, Hardware.
Presentation skills	I regularly give lectures on a series of management/research topics to academic and business audiences. I have presented several times in front of sizable international audiences in academic conferences and company workshops. I am regularly invited to give talks to senior executives on issues of demand planning and statistical forecasting. Furthermore, I continuously practice my lecturing skills in courses and workshops for executive, postgraduate and undergraduate audiences. I regularly present in both English and Greek.
Organisational Skills	During my research career I have been responsible for organising university and executive training courses for groups up to 200 attendees (MSCI 543, MSCI 381, LCF executive training workshops). I have been responsible for managing project teams up to 12 people (Athens University of Economics and Business, Lancaster University, Lancaster Centre for Forecasting) and regularly lead applied research teams in my collaborations with industrial organisations. Furthermore, I have experience in organising large international conferences, namely the annual management symposium of the Athens University of Economics and Business (2000-2004) and the International Conference on Data Mining (2010-2011), with several hundreds of attendees.
Social skills	Throughout my international academic career I constantly improve my communication skills, living in a multicultural environment. I regularly work in teams of 3-5, building strong team links and taking the leading role when needed. My teaching experience has been very beneficial for improving my classroom interaction skills and understanding of different cultures.
Additional Information	
Military Service	I have completed my 1-year compulsory Greek military service in 2004/2005.
Driving License	Category B (Car), Sailing Licence

## References

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Supplied upon request