

Prof. Nikolaos Kourentzes

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University profile	http://www.lancaster.ac.uk/lums/people/nikos-kourentzes
Research bog	http://nikolaos.kourentzes.com (average monthly pageviews: 20,000+)
Nationality	Greek

Education

09/2012 – 09/2013 Topic	Certificate for Academic Practice, Fellow of The Higher Education Academy, UK Courses and research on teaching practices and course development.
10/2006 – 12/2009 Topic Awards	PhD in Management Science, Department of Management Science, Lancaster University Management School, Lancaster University, UK Input variable selection for time series forecasting with artificial neural networks – an empirical evaluation across varying time series frequencies. 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 Grade Awards	MSc in Operational Research, Department of Management Science, Lancaster University Management School, Lancaster University, Lancaster, UK 76 out of 100 (Distinction) Full scholarship from Greek State Scholarship Foundation (IKY).
10/2000 – 10/2004 Grade Awards	Ptychion (4-Year Degree) in Business Administration, Athens University of Economics and Business, Athens, Greece 8.63 out of 10 (Distinction – Top 1%) Greek State Scholarships Foundation (IKY) Award (top 1% in the department). Chalkiopolou Foundation Award (top 1% in the university).

Academic Positions

10/2019-Today	Professor in Predictive Analytics and AI, Skövde Artificial Intelligence Lab. School of Informatics, Skövde University, Sweden
08/2018-Today	Professor in Predictive Analytics – Management Science Department of Management Science, Lancaster University Management School, UK.
10/2016-10/2019	Visiting Professor Centre for Data Analytics, Stockholm School of Economics, Sweden.
07/2015-07/2018	Associate Professor - Management Science. Department of Management Science, Lancaster University Management School, UK.
09/2011-07/2015	Assistant Professor - Management Science. Department of Management Science, Lancaster University Management School, UK.
10/2009-09/2011	Post-Doctorate Research Associate. Department of Management Science, Lancaster University Management School, UK.
10/2006-10/2009	Research Associate. Lancaster Centre for Forecasting, Lancaster University Management School

Publications

Journal Papers

- N. Kourentzes, G. Athanasopoulos, 2020. Elucidate structure in intermittent demand time series. *European Journal of Operational Research* (ABS 4)
- N. Kourentzes, J. R. Trapero, D. K. Barrow, 2020. Optimising forecasting models for inventory planning. *International Journal of Production Economics*. (ABS: 3)
- E. Spiliotis, F. Petropoulos, N. Kourentzes, V. Assimakopoulos, 2020. Cross-temporal aggregation: Improving the forecast accuracy of hierarchical electricity consumption, *Applied Energy*, 261.
- N. Kourentzes, G. Athanasopoulos, 2019. Cross-temporal coherent forecasts for Australian tourism. *Annals of Tourism Research*, 75. (ABS: 4)
- Y. Sagaert, N. Kourentzes, S. De Vuyst, E-H. Aghezzaf, B. Desmet, 2018, Incorporating macroeconomic leading indicators in tactical capacity planning. *International Journal of Production Economics*, 209: 12-19. (ABS: 3)
- J. R. Trapero, R. Cardos and N. Kourentzes, 2019, Empirical safety stock estimation based on kernel and GARCH models. *OMEGA*, 84: 199-211. (ABS: 3)
- J. R. Trapero, R. Cardos and N. Kourentzes, 2019, Quantile forecast optimal combination to enhance safety stock estimation. *International Journal of Forecasting*, 35(1): 239-250. (ABS: 3)
- N. Kourentzes, D. K. Barrow and F. Petropoulos, 2019. Another look at forecast selection and combination: evidence from forecast pooling. *International Journal of Production Economics*, 209: 226-235. (ABS: 3)
- O. Schaer, N. Kourentzes, R. Fildes, 2019, Demand forecasting with user generated online information. *International Journal of Forecasting*, 35(1): 197-212. (ABS: 3)
- F. Petropoulos, N. Kourentzes, K. Nikolopoulos and E. Siemsen, 2018, Judgemental Selection of Forecasting Models. *Journal of Operations Management*, 60: 34-46. (ABS: 4*)
- Y. Sagaert, E-H. Aghezzaf, N. Kourentzes and B. Desmet, 2018, Tactical sales forecasting using a very large set of macroeconomic indicators. *European Journal of Operational Research*, 264(2): 558-569. (ABS: 4)
- D. K. Barrow, N. Kourentzes, 2018, The Impact of Special Days in Call Arrivals Forecasting: A Neural Network Approach to Modelling Special Days. *European Journal of Operational Research*, 264(3): 967-977 (ABS: 4)
- G. Athanasopoulos, R.J. Hyndman, N. Kourentzes, F. Petropoulos, 2017, Forecasting with temporal hierarchies. *European Journal of Operational Research*, 262(1): 60-74. (ABS: 4)
- N. Kourentzes, B. Rostami-Tabar and D. K. Barrow, 2017, Demand forecasting by temporal aggregation: using optimal or multiple aggregation levels? *Journal of Business Research*, 78:1-9. (ABS: 3)
- Y. Sagaert, E-H. Aghezzaf, N. Kourentzes and B. Desmet, 2017, Temporal big data for tire industry tactical sales forecasting. *Interfaces*. (ABS: 2)
- N. Kourentzes, L. Dong and A. Strauss, 2017, Unconstraining Methods for Revenue Management Systems under Small Demand. *Journal of Revenue and Pricing Management*, 1-15 (ABS: 2)
- F. Petropoulos, N. Kourentzes, K. Nikolopoulos, 2016, Another look at estimators for intermittent demand. *International Journal of Production Economics*, 181: 154-161. (ABS: 3)
- D. K. Barrow, N. Kourentzes, 2016, Distributions of forecasting errors of forecast combinations: implications for inventory management. *International Journal of Production Economics*, 177: 24-33. (ABS: 3)
- N. Kourentzes, F. Petropoulos, 2015, Forecasting with multivariate temporal aggregation: The case of promotional modelling. *International Journal of Production Economics*, 181: 145-153. (ABS: 3).
- J. R. Trapero, N. Kourentzes, Martin, A., 2015, Short-term solar irradiation forecasting based on dynamic harmonic regression. *Energy*. 84, 289-295. (ABS: 3).
- N. Kourentzes, 2014, On intermittent demand model optimisation and selection, *International Journal of Production Economics*, 156: 180-190. (ABS: 3).
- F. Petropoulos, N. Kourentzes, 2014, Forecast combinations for intermittent demand, *Journal of the Operational Research Society*, 66: 914-924. (ABS: 3).
- 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*, 66: 299-307. (ABS: 3).
- 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. (ABS: 3). **IJF 2014-2015 best paper award.**
- N. Kourentzes, D. K. Barrow, S. F. Crone, 2014, Neural Network Ensemble Operators for Time Series Forecasting, *Expert Systems with Applications*, 41: 4236-4244. (ABS: 3).
- N. Kourentzes, 2013, Intermittent Demand Forecasts with Neural Networks, *International Journal of Production Economics*, 143: 198-206. (ABS: 3).
- 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. (ABS: 3).
- J. R. Trapero, N. Kourentzes, R. Fildes, 2012, Impact of Information Exchange on Supplier Forecasting Performance, *OMEGA*, 40: 738-747. (ABS: 3).

- R. Fildes and N. Kourentzes, 2011, Validation in models of climate change and forecasting accuracy, *International Journal of Forecasting*, 27: 968-995. (ABS: 3).
 - R. Fildes and N. Kourentzes, 2011, Validation in models of climate change and forecasting accuracy: Postscript, *International Journal of Forecasting*, 27: 1004-1005. (ABS: 3).
 - 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.
- Books
- K. Ord, R. Fildes and N. Kourentzes, 2017, *Principles of Business Forecasting*, 2nd ed. Wessex Press Publishing Co.
- Book Chapters
- 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.

Software development

R packages:

- Kourentzes N., 2019, tsutils package. Downloads: 5,188.
- Schaer O. and Kourentzes N., 2018, diffusion package. Downloads: 3,817.
- Kourentzes N., 2017, nnfor package. Downloads: 12,329.
- Hyndman R. and Kourentzes N., 2016, thief package. Downloads: 16,264.
- Kourentzes N. and Petropoulos F., 2014, MAPA package. Downloads: 127,191.
- Kourentzes N. and Petropoulos F., 2014, tsintermittent package. Downloads: 111,054.

Supervision

- Completed PhD
- P. S. Saoud. Modelling demand and inventory in multi-tier supply chains with promotions, 2020.
 - O. Schaer. Sales and new product forecasting with online search and behavioural data, 2019.
 - D. Waller. High frequency retail modelling with loyalty card data, 2019.
 - C. Wright. Forecasting traffic and risk for transportation networks, 2019.
 - L. Liu, Gamification in a learning disability context, 2018.
 - Y. R. Sagaert. Tactical sales forecasting with massive macroeconomic indicator datasets, 2017.
 - I. Svetunkov. Forecasting with complex exponential smoothing, 2016.
- Current PhD
- S. Barak, 3rd year. Meta-learning using deep networks.
 - A. Sroginis, 3rd year. Judgemental forecasting support systems and organisational processes.
 - K. Pritularga, 1st year. Hierarchical forecasting using multivariate models.
 - C. R. Calderon, 1st year. Machine learning methods for retail forecasting.
- MSc Supervision
- 2019. 6 industry related MSc Projects (Delonghi*, Desco, Heineken*)
 - 2018. 4 industry related MSc Projects (Desco, Jaguar-Land Rover, Morrisons)
 - 2016: 8 industry related MSc Projects (LEGO*, Tesco*, Médecins Sans Frontières*, ASM*, BES)
 - 2015: 6 industry related and 3 research MSc Projects. (LEGO*, Co-op, ASM*)
 - 2014: 4 industry related and 1 research MSc Projects. (BskyB*, McBrides*)
 - 2013: 2 industry related and 4 research MSc Projects (Booths*)
 - 2012: 2 industry related and 1 research MSc Projects (BT*)
- * I sourced these industry projects for the MSc programme.

Successful Research Grants

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| 2017 | £4,500 Lancaster University Impact Grant
Develop an online portal to disseminate to practitioners R packages. |
| 2015 | £3,831, LUMS Collaborative Writing Awards, Lancaster University Management School
Reconciling strategic, tactical and operational forecasting and decision making using temporal hierarchies. |
| 2014 | £5,000, University Small Grants Scheme, Lancaster University
Judgmental model selection for time series. |
| 2013 | £4,955, University Small Grants Scheme, Lancaster University
Improving forecasting by estimation of time series structural components across multiple sampling frequencies. |
| 2013 | £3,978, University Small Grants Scheme, Lancaster University
Modelling the effect of promotions on future demand across supply chain levels. |
| 2012 | £6,700, University Early Career Grant, Lancaster University
Regularised exponential smoothing models for time series forecasting business operations. |
| 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. |

Selected Industry Related Projects

2015-2016 Details	Howdens, UK (~£10K) Evaluation and benchmarking of forecasting process.
2013-2014 Details	BskyB, London, UK (~£30K) Forecasting process benchmarking and reengineering.
2011-2012 Details	DONG Energy, Copenhagen, Denmark (~£5K) 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 (~£6K) Provide expert support to forecasting slow moving items for network repairs and installations for new customers with applications to inventory management optimisation.
2010 Details	Sanofi-Aventis, Surrey, UK (~£6K) 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 (~£4K) Analyse and develop advanced time series forecasting models analysis for supply chain and demand planning applications.
2009-2010 Details	Retail Express, Leeds, UK (~£8K) 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 (~£12K) 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 (~£5K) 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 (~£20K) 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

MSCI 582: Marketing Analytics and Modelling	
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 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, 2017-2018, 2018-2019.
EBIN 510: E-Marketing	
Details	Postgraduate management science course at Lancaster University. Lectures and tutorials. Developed new course material.

Years	2012-2013
MSCI 543: Marketing Analysis and Modelling	
Details	Postgraduate management science course at Lancaster University. Lectures and tutorials. Developed new course material.
Years	2009-2010, 2011-2012
MSCI 523: Forecasting Module	
Details	Postgraduate management science course at Lancaster University. Tutorials and partial teaching of lectures.
Years	2007-2008, 2008-2009, 2009-2010
MSCI 524: Credit Scoring	
Details	Postgraduate management science course at Lancaster University. Tutorials and partial teaching of lectures.
Years	2009-2010
MSCI 331: Data Mining	
Details	Undergraduate management science course at 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 and Industry Courses

2006-Today Details	Centre for Marketing Analytics & Forecasting: Forecasting Fundamentals Teach 2-day forecasting workshops for practitioners (17 workshops). Since 2009 I have course director responsibilities
2008-Today Details	Centre for Marketing Analytics & Forecasting: SAP APO-DP courses Teach SAP APO-DP forecasting workshops tailored to the needs of specific companies. Past companies include: Wilko (UK) 1 workshop, Celanese (USA) 2 workshops, Beiersdorf (Germany) 7 workshops and Beiersdorf (Brazil) 1 workshop.
2019 Details	Forecasting Principles Workshop. Design and deliver 1-day workshop on principles of predictive analytics for Trine (Sweden)
2018 Details	Forecasting Practice Workshop. Design and deliver 1-day Workshop on forecasting for H&M (Sweden)
2017 Details	Statistical Demand Planning Course with SAP-APO DP. Design and deliver 2-day forecasting workshop for McBride (UK)
2016 Details	Statistical Demand Planning Course with SAP-APO DP. Design and deliver 2-day forecasting workshop for British Gypsum (UK)
2013 Details	Statistical Demand Planning Course. Design and deliver 2-day forecasting workshop for BskyB (UK).
2013-Today Details	Advanced Forecasting Courses on Slow Moving Items and Intermittent Demand Teach 1-day forecasting workshop for practitioners.
2012 Details	Inventory Management Course Design and deliver 1-day inventory management workshop for Bayer (Germany).
2011 Details	Advanced Forecasting Course Design and deliver 3-day advanced forecasting workshop for DONG Energy (Denmark).
2011 Details	Advanced Forecasting Course Design and deliver 2-day advanced forecasting workshop for Bayer Cropscience (Germany).

2010	Advanced Forecasting Course
Details	Organise and teach two 2-day advanced forecasting workshops for the Home Office and Ministry of Justice.
2009	Neural Networks for forecasting Course
Details	Three day neural network forecasting workshop for practitioners.

Selected Conference Presentations

International Symposium on Forecasting (ISF)	Years: 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019.
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, 2018
Operational Research Society Conference (OR)	Years: 2018
Production and Operations Management Society (POMS)	Years: 2019

Conference Organisation

International Conference on Data Mining (DMIN)	2011	Programme Chair
International Conference on Data Mining (DMIN)	2010, 2011	Student Chair
International Symposium on Forecasting (ISF)	2021	Programme Chair

Professional Associations

2011-2015	European Institute for Advanced Studies in Management (EIASM) - Member
Details	The European Institute for Advanced Studies in Management is an international network for management research and teaching.
2009-2015	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.
2014-Today	International Society for Inventory Research (ISIR) – Member
Details	ISIR is a nonprofit organisation, which endeavors to provide those engaged in inventory research with an opportunity to exchange views and experiences on an international and interdisciplinary basis.

Skills

Languages	Greek (Native Language) English (Fluent – Cambridge Proficiency) French (Beginner), German (Beginner), Spanish (Beginner), Swedish (Beginner)
Research Skills	Business forecasting, predictive analytics, artificial intelligence, supply chain modelling, econometric model building, intermittent demand modelling, new product forecasting, promotional modelling, clustering, classification, dimensionality reduction
Computer skills and competences	MATLAB, R, SAS, SAP APO-DP, C++, LaTeX, 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 as keynote in corporate workshops (e.g. LEGO, 2016) and academic conferences.
Organisational Skills	During my academic career I have been responsible for organising university and executive training courses for groups up to 200 attendees (MSCI 582, MSCI 381, executive training workshops). I have been responsible for managing project teams of up to 12 people (Centre for Marketing Analytics & Forecasting) and regularly lead teams in my collaborations with industrial organisations.
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 multicultural interaction skills.