

# Curriculum Vitae Ioannis Kosmidis

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## RESEARCH INTERESTS

penalized and pseudo likelihood theory and methods; statistical computing and algorithms for regression models; methods for clustering; interdisciplinary data-analytic applications; software development.

## EDUCATION

10/2004 – 09/2007 **PhD in Statistics, University of Warwick** viva 21/09/2007  
01/2003 – 06/2003 Department of Probability and Statistics, **University of Sheffield** (ERASMUS exchange)  
09/2000 – 06/2004 **BSc (Statistics), Athens University of Economics and Business**

## EMPLOYMENT HISTORY AND AFFILIATIONS

08/2021 – present **Professor of Statistics**, Department of Statistics, **University of Warwick**  
04/2023 – present **Honorary Professor of Statistics**, Department of Statistical Science, **University College London**  
01/2018 – 08/2021 **Reader in Data Science**, Department of Statistics, **University of Warwick**  
01/2018 – 01/2023 **Honorary Reader in Statistics**, Department of Statistical Science, **University College London**  
09/2016 – present **Turing Fellow, Alan Turing Institute**  
10/2015 – 12/2017 **Senior Lecturer**, Department of Statistical Science, **University College London**  
09/2010 – 09/2015 **Lecturer**, Department of Statistical Science, **University College London**  
01/2012 – 07/2012 **Senior Research Fellow**, Department of Statistics, **University of Warwick**  
09/2007 – 09/2010 **CRISM Research Fellow**, Department of Statistics, **University of Warwick**

## PROFESSIONAL SERVICE

### Editorial responsibilities and refereeing activity

01/2021 – present **Committee member** at the **Royal Statistical Society's Research Section**  
10/2011 – present **Associate Editor** for the **Journal of Statistical Software**  
01/2018 – 01/2023 **Associate Editor** for **Biometrika**  
10/2013 – 12/2019 **Associate Editor** for **Statistics and Computing**  
09/2007 – present **Referee** for **more than 30 journals**

### Membership of professional societies, committees, and research groups

#### Current

10/2007 – present Royal Statistical Society (fellow)

#### Past

05/2020 – 01/2022 Liaison in the EUTOPIA Learning Community "Data and critical thinking"  
09/2017 – 09/2022 Turing Interest Group on Data Science for Sports, Activity, and Well-being (founder, organizer)  
11/2016 – 10/2021 Royal Statistical Society's Statistics in Sport Section (committee member)  
01/2019 – 09/2020 Turing Interest Group on Machine Learning by Systems, for Systems (member)  
09/2017 – 09/2020 Turing Interest Group on Online Machine Learning (member)  
09/2015 – 12/2017 Statistics for Health Economic Evaluation research group, University College London (member)  
05/2015 – 12/2017 Statistics in Sports and Health research group, University College London (founder, leader)  
09/2014 – 12/2017 EPICentre research group, University College London (member)

### Organisation of conferences, workshops and scientific events

O: Organiser, CO: Co-Organiser, SPC: Scientific Programme Committee

08/2022 CO, SPC **Greek Stochastics  $\mu'$**  (Corfu, Greece)  
08/2019 CO, SPC **Greek Stochastics  $\lambda'$**  (Corfu, Greece)  
03/2018 O BayesComp 2018 invited session  
**Deterministic approximation methods and pseudo-likelihoods** (Barcelona, Spain)

12/2018	CO, SPC	<b>Greek Stochastics <math>\kappa'</math></b> (Athens, Greece)
07/2017	CO, SPC	<b>Greek Stochastics <math>\iota'</math></b> (Milos, Greece)
06/2017	CO, SPC	<b>3rd UCL Workshop on the theory of big data</b> (London, UK)
01/2016	CO, SPC	<b>2nd UCL Workshop on the theory of big data</b> (London, UK)
07/2016	CO, SPC	<b>Greek Stochastics <math>\theta'</math></b> (Tinos, Greece)
11/2015	CO, SPC	Alan Turing Institute Scoping Workshop <b>Data Science for Data-rich Sports</b> (London, UK)
01/2015	CO, SPC	<b>1st UCL Workshop on the theory of big data</b> (London, UK)
12/2014	O	ERCIM 2014 invited session <b>Handling nuisance parameters</b> (Pisa, Italy)
09/2012	CO	<b>Imperial-UCL Joint Statistics Symposium</b> (London, UK)
09/2011	CO, SPC	<b>useR! 2011 Conference</b> (Coventry, UK)
04/2008	CO	<b>Workshop on Composite Likelihood Methods</b> (Coventry, UK)

### Organisation of other academic and enabling activities

06/2019 – 10/2023	Theory & Methods Challenge Fortnights in Data Science and Artificial Intelligence, Turing Institute
02/2016 – 06/2016	Reading group on "Statistical Learning with Sparsity"
11/2016 – 12/2016	Statistics in Sports and Health 2016 meet-up series
02/2011 – 06/2012	CSML book club on "Asymptotic Statistics"
11/2010 – 09/2011	Reading group on "Foundations of Statistics"

### Academic administration

09/2022 – 09/2023	Course Director in Data Science, University of Warwick
06/2018 – 06/2023	External examiner for the International Foundation Programme, University of London
04/2023 – 09/2023	Turing Liaison (academic), University of Warwick
01/2022 – 03/2023	Turing University Lead, University of Warwick
09/2019 – 12/2021	Course Director in Data Science, University of Warwick
09/2019 – 09/2020	Member of the Management Group, Department of Statistics, University of Warwick
06/2015 – 06/2019	External examiner to the EMFSS Board of Examiners, University of London International Academy
10/2013 – 12/2017	Member of the Bibliometrics working group, University College London
01/2011 – 12/2017	Chair of the Computing and Infrastructure Committee, Department of Statistical Science, University College London
09/2008 – 09/2010	Programme Manager of the Academy for PhD Training in Statistics (APTS)
01/2009 – 09/2010	Computing Committee Member, Department of Statistics, University of Warwick
01/2008 – 09/2010	Contract Research Staff Representative, Department of Statistics, University of Warwick
09/2005 – 09/2006	Chairman of Postgraduate Staff Student Liaison Committee, Department of Statistics, University of Warwick

## PUBLICATIONS

### Theory and methods

- P1. Bayesian Tensor Factorisations for Time Series of Counts.  
Wang Z, Dellaportas P, Kosmidis I (2023+)  
**Machine Learning** (accepted).  
Journal Track Paper of The 15th Asian Conference on Machine Learning (**ACML 2023**).  
*Preprint at ArXiv e-prints (2311.06076)*
- P2. Empirical bias-reducing adjustments to estimating functions.  
Kosmidis I, Lunardon N (2023+)  
**Journal of the Royal Statistical Society: Series B** (to appear).  
*Preprint at ArXiv e-prints (2001.03786)*
- P3. Mean and median bias reduction: A concise review and application to adjacent-categories logit models  
Kosmidis I (2023)  
In: Kateri, M., Moustaki, I. (eds) **Trends and Challenges in Categorical Data Analysis. Statistics for Social and Behavioral Sciences**. Springer, Cham.  
*Preprint at ArXiv e-prints (2112.02621)*
- P4. Scalable Marked Point Processes for Exchangeable and Non-Exchangeable Event Sequences.  
Panos A, Kosmidis I, Dellaportas P (2023)  
In: Proceedings of The 26th International Conference on Artificial Intelligence and Statistics (**AISTATS 2023**), PMLR 206:236-252  
*Preprint at ArXiv e-prints (2105.14574)*

- P5. Flexible marked spatio-temporal point processes with applications to event sequences from association football.  
Narayanan S, Kosmidis I, Dellaportas P (2023+)  
**Discussion paper in the Journal of the Royal Statistical Society: Series C** (to appear).  
*Preprint at ArXiv e-prints (2103.04647)*
- P6. Maximum softly-penalized likelihood for mixed effects logistic regression.  
Sterzinger P, Kosmidis I (2023)  
**Statistics and Computing, 33**, 53.
- P7. Parametric bootstrap inference for stratified models with high-dimensional nuisance specifications.  
Bellio R, Kosmidis I, Salvan A, Sartori N (2023)  
**Statistica Sinica, 33**.
- P8. Two-way sparsity for time-varying networks with applications in genomics.  
Bartlett T E, Kosmidis I, Silva R (2021)  
**Annals of Applied Statistics, 15**, 866–879.
- P9. Voxel-wise and spatial modelling of binary lesion masks: Comparison of methods with a realistic simulation framework.  
Kindalova P, Kosmidis I, Nichols T E (2021)  
**NeuroImage, 236**, 118090.
- P10. Jeffreys-prior penalty, finiteness and shrinkage in binomial-response generalized linear models.  
Kosmidis I, Firth D (2021)  
**Biometrika, 108**. 71–82
- P11. Mean and median bias reduction in generalized linear models.  
Kosmidis I, Kenne Pagui E C, Sartori N (2020)  
**Statistics and Computing, 30**, 43–59
- P12. Location-adjusted Wald statistic for scalar parameters.  
Di Caterina C, Kosmidis I (2019)  
**Computational Statistics and Data Analysis, 138**, 126–142
- P13. Median bias reduction in random-effects meta-analysis and meta-regression.  
Kyriakou S, Kosmidis I, Sartori N (2019).  
**Statistical Methods in Medical Research, 28**, 1622–1636
- P14. Improving the accuracy of likelihood-based inference in meta-analysis and meta-regression.  
Kosmidis I, Guolo A, Varin C (2017)  
**Biometrika, 104**, 489–496
- P15. Model-based clustering using copulas with applications.  
Kosmidis I, Karlis D (2016).  
**Statistics & Computing, 26**, 1079–1099
- P16. Bias in parametric estimation: reduction and useful side-effects.  
Kosmidis I (2014).  
**WIRE Computational Statistics, 6**, 185–196
- P17. Improved estimation in cumulative link models.  
Kosmidis I (2014).  
**Journal of the Royal Statistical Society: Series B, 76**, 169–196
- P18. Multinomial logit bias reduction via the Poisson log-linear model.  
Kosmidis I, Firth D (2011).  
**Biometrika, 98**, 755–759
- P19. Simulating events of unknown probabilities via reverse time martingales.  
Latuszynski K, Kosmidis I, Papaspiliopoulos O, Roberts G O (2011).  
**Random Structures and Algorithms, 38**, 441–452
- P20. A generic algorithm for reducing bias in parametric estimation.  
Kosmidis I, Firth D (2010).  
**Electronic Journal of Statistics, 4**, 1097–1112
- P21. Bias reduction in exponential family non-linear models.  
Kosmidis I, Firth D (2009).  
**Biometrika, 96**, 793–804

### Applications

- P22. A Bayesian inference approach for determining player abilities in football.  
Whitaker, G A, Silva, R, Edwards, D, Kosmidis, I (2021).  
**Journal of the Royal Statistical Society: Series C, 70**
- P23. Spatial distribution and cognitive impact of cerebrovascular risk-related white matter hyperintensities.  
Veldsman M, Kindalova P, Husain M, Kosmidis I, Nichols T E (2020).

- NeuroImage: Clinical**, **28**, 102405.
- P24. Modeling outcomes of soccer matches.  
Tsokos, A, Narayanan, S, Kosmidis, I, Baio, G, Cucuringu, M, Whitaker, G, Király, F J (2019).  
**Machine Learning**, **108**, 77-95
- P25. Empirical seismic vulnerability assessment of Icelandic buildings affected by the 2000 sequence of earthquakes.  
Ioannou I, Bessason B, Kosmidis I, Bjarnason J Ö, Rossetto T (2018).  
**Bulletin of Earthquake Engineering**, **16**, 5875–5903
- P26. Seismic vulnerability functions for Australian buildings by using GEM empirical vulnerability assessment guidelines.  
Maqsood T, Edwards M., Ioannou I, Kosmidis I, Rossetto T, Corby N (2015).  
**Natural Hazards**, **80**, 1625–1650
- P27. Liquidity commonality does not imply liquidity resilience commonality: A functional characterisation for ultra-high frequency cross-sectional LOB data.  
Panayi E, Peters G W, Kosmidis I (2015).  
**Quantitative Finance**, **15**, 1737–1758
- P28. Upside and downside risk exposures of currency carry trades via tail dependence.  
Ames M, Peters G, Bagnarosa G, Kosmidis I (2015).  
In: Glau K, Scherer M, Zagst R (Eds.), **Innovations in Quantitative Risk Management**, Volume 99 of Springer Proceedings in Mathematics & Statistics, 163–181

#### Papers on statistical software

- P29. Modelling rankings in R: the PlackettLuce package.  
Turner H L, van Etten J, Firth D, Kosmidis I (2020)  
**Computational Statistics** **35**, 1027–1057
- P30. trackeR: Infrastructure for running and cycling data from GPS-enabled tracking devices in R.  
Frick H, Kosmidis I (2017)  
**Journal of Statistical Software**, **82** (7)  
*Vignette*: <https://cran.r-project.org/web/packages/tracker/vignettes/tracker.pdf>
- P31. Extended Beta Regression in R: Shaken, Stirred, Mixed, and Partitioned.  
Grün B, Kosmidis I, Zeileis A (2012).  
**Journal of Statistical Software**, **48** (11)
- P32. The profileModel R package: Profiling objectives for models with linear predictors.  
Kosmidis, I (2008).  
**R News**, **8/2**, 12–18, R Foundation for Statistical Computing

#### Working papers and unpublished reports (titles subject to change; authors listed alphabetically with no preprint link)

- P33. Jeffreys-prior penalty for high-dimensional logistic regression: A conjecture about aggregate bias.  
Kosmidis I, Zietkiewicz P  
*Preprint at ArXiv e-prints (2311.11290)*
- P34. Diaconis-Ylvisaker prior penalized likelihood for  $p/n \rightarrow \kappa \in (0, 1)$  logistic regression.  
Sterzinger P, Kosmidis I  
*Preprint at ArXiv e-prints (2311.07419)*
- P35. Bounded-memory adjusted scores estimation in generalized linear models with large data sets.  
Zietkiewicz P, Kosmidis I  
*Preprint at ArXiv e-prints (2307.07342)*
- P36. Penalized generalized estimating equations for relative risk regression with applications to brain lesion data.  
Kindalova P, Veldsman M, Nichols T E, Kosmidis I  
*Preprint at bioRxiv e-prints (DOI: 10.1101/2021.11.01.466751)*
- P37. Bias reduction as a remedy to the consequences of infinite estimates in poisson and tobit regression.  
Köll S, Kosmidis I, Kleiber C, Zeileis A  
*Preprint at ArXiv e-prints (2101.07141)*
- P38. Davidson-Luce model for multi-item choice with ties.  
Firth D, Kosmidis I, Turner H L  
*Preprint at ArXiv e-prints (1909.07123)*
- P39. Multi yield curve stress-testing framework incorporating temporal and cross tenor structural dependencies.  
Karimalis E, Kosmidis I, Peters G W  
*Preprint at Bank of England Staff Working Paper Series (Working Paper 655)*
- P40. Linking the performance of endurance runners to training and physiology effects via multi-resolution elastic net.  
Kosmidis I, Passfield L  
*Preprint at ArXiv e-prints (1506.01388)*
- P41. Supervised sampling for clustering large data sets.

Kosmidis I, Karlis D

*Preprint at CRiSM Working Paper Series (Paper 10-10)*

P42. On iterative adjustment of responses for the reduction of bias in binary regression models

Kosmidis I

*Preprint at CRiSM Working Paper Series (Paper 09-36).*

P43. Modelling bounded-responses in the presence of boundary observations.

Kosmidis I, Zeileis A

P44. Fixed-effects estimation of two-parameter logistic models.

Bellio R, Kosmidis I, Sartori N

P45. Scalable computation for generalized linear and nonlinear models in the presence of a large nuisance factor.

Firth, D, Kosmidis, I

P46. The brglm2 R package: Reduced-bias inference for generalized linear models with dispersion parameters.

Kosmidis I

## SOFTWARE

### Stable

- S1. `betareg`: Beta regression (R; author)
- S2. `brglm`: Bias reduction for binomial-response generalized linear models (R; author, maintainer)
- S3. `brglm2`: Bias Reduction in Generalized Linear Models (R; author, maintainer)
- S4. `cranly`: Package directives and collaboration networks in CRAN (R; author, maintainer)
- S5. `detectseparation`: Detect and check for separation and infinite maximum likelihood estimates (R; author, maintainer)
- S6. `enrichwith`: Methods to enrich various R objects with extra components (R; author, maintainer)
- S7. `GEEBRA` General estimating equations with or without bias-reducing adjustments (Julia; author; maintainer)
- S8. `MEstimation` Methods for M-estimation of statistical models (Julia; author; maintainer)
- S9. `PlackettLuce`: Plackett-Luce models (R; author)
- S10. `profileModel`: Tools for profiling inference functions for various model classes (R; author, maintainer)
- S11. `semnar`: Methods for constructing and interacting with databases of presentations (R; author, maintainer)
- S12. `trackerR`: Infrastructure for running, cycling and swimming data from GPS-enabled tracking devices (R; author, maintainer)
- S13. `trackerRapp` Interface for the analysis of running, cycling and swimming data (R; author, maintainer)

### In early development phase

- S14. `brtobit`: Bias-reduced Tobit regression models (R; author)
- S15. `brquasi`: Bias reduction in quasi likelihood estimation (R; author, maintainer)
- S16. `brRasch`: Maximum likelihood and bias reduction for fixed-effects Rasch models (R; author, maintainer)
- S17. `coursehand`: Course handbook maintenance at the Department of Statistics, University of Warwick (R; author, maintainer)
- S18. `GoldenCheetahOpenData`: R API and Local Database Management for the GoldenCheetah OpenData Project (R; author, maintainer)
- S19. `waldi`: Location-adjusted Wald statistics (R; author, maintainer)

### Publication profiles

Google Scholar <https://scholar.google.co.uk/citations?user=CpZBF2wAAAAJ>

ResearcherID <http://www.researcherid.com/rid/A-3012-2012>

## RESEARCH VISITS & INVITED TALKS

IS: Invited Seminar/Talk, RV: longer Research Visit, ID: Invited Discussant, KE: Keynote talk

- 08/2023 IS **Joint Statistical Meetings 2023**, Toronto, Canada
- 06/2023 IS **Jean Golding Institute and Heilbronn Institute**, Bristol, UK
- 05/2023 IS, RV Informatics and Statistics, **Ca' Foscari University**, Italy
- 11/2022 IS Algorithms & Computationally Intensive Inference seminars, **University of Warwick**, UK
- 11/2022 IS School of Economics, **University of Surrey**
- 07/2022 IS, KE **International Workshop on Statistical Modelling 2022**, Trieste, Italy
- 05/2022 IS Research School of Finance, Actuarial Studies and Statistics, **Australian National University**, Australia
- 03/2022 IS Algorithms & Computationally Intensive Inference seminars, **University of Warwick**, UK
- 03/2021 IS Department of Statistics, **Athens University of Economics and Business**, Greece

12/2020 IS Department of Statistics Teaching Forum, **University of Warwick**, UK

12/2020 IS Learning Tools and Applied Quantitative Methods for Decision Making, **Free University of Bozen-Bolzano**, Italy

10/2020 IS Department of Mathematical Sciences, **Durham University**, United Kingdom

06/2020 IS **European R users meeting (eRum) 2020**, Milan, Italy

03/2020 IS Geneva School of Economics and Management, **University of Geneva**, Switzerland

03/2020 IS Institute of Mathematics, **EPFL**, Lausanne, Switzerland

03/2020 IS School of Mathematics, **Cardiff University**, UK

02/2020 IS Department of Mathematics, **Imperial College London**, UK

02/2020 IS Big Data Institute, **University of Oxford**, UK

02/2020 IS Algorithms & Computationally Intensive Inference seminars, **University of Warwick**, UK

01/2020 IS, RV School of Mathematics and Statistics, **University College Dublin**, Ireland

12/2019 IS REG tech talks, **The Alan Turing Institute**, London, UK

09/2019 IS, RV Department of Economics and Statistics, **University of Udine**, Italy

09/2019 IS **RSS Conference 2019**, Belfast, Ireland

08/2019 IS **WHOA-PSI 4**, St. Louis, MO, USA

07/2019 IS, KE **MathSports International 2019**, Athens, Greece

06/2019 IS, RV Department of Statistical Sciences, **University of Toronto**, Canada

05/2019 IS Young Researchers' Meeting, Department of Statistics, **University of Warwick**, UK

05/2019 IS Theory and Algorithms in Data Science seminar, **The Alan Turing Institute**, London, UK

04/2019 IS **CRoNoS & MDA 2019**, Limassol, Cyprus

04/2019 IS School of Mathematics, **University of Manchester**, UK

02/2019 IS Algorithms & Computationally Intensive Inference seminars, **University of Warwick**, UK

11/2018 IS School of Mathematics, **University of Edinburgh**, UK

10/2018 IS **Oxford R Users Group**, UK

10/2018 IS, RV Department of Economics, Quantitative Methods and Business Strategy, **University of Milano-Bicocca**, Italy

10/2018 IS **Workshop on Challenges for Categorical Data Analysis**, Aachen, Germany

10/2018 IS OxWasp Annual Workshop 2018, **University of Warwick**, Coventry, UK

06/2018 IS **ISNPS 2018**, Salerno, Italy

06/2018 IS **Workshop on Machine Learning and Econometrics**, **CEMMAP**, London, UK

05/2018 IS Institute of Statistics and Mathematics, **WU Wien**, Austria

12/2017 IS Department of Mathematics, **King's College London**, UK

11/2017 IS **2nd AUEB Sports Analytics Workshop 2017**, Athens, Greece

08/2017 IS **CEN ISBS Joint Conference on Biometrics & Biopharmaceutical Statistics**, Vienna, Austria

03/2017 IS S3RI, **University of Southampton**, UK

02/2017 IS CeMSIIS, **Medical University of Vienna**, Austria

02/2017 IS Department of Statistics, **University of Warwick**, UK

02/2017 IS Department of Statistical Science, **University College London**, UK

01/2017 IS, RV Empirical Economics and Econometrics Research Centre, **University of Innsbruck**, Austria

11/2016 IS School of Mathematics and Statistics, **University of Glasgow**, UK

11/2016 IS Department of Mathematics, **University of York**, UK

05/2016 IS **Royal Statistical Society East Midlands Local Group**, Nottingham, UK

02/2016 IS School of Mathematics, **University of Edinburgh**, UK

11/2015 IS, RV Department of Economics, **Universitat Pompeu Fabra**, Spain

11/2015 IS Meeting of the Statistical Computing and Sport Sections, **Royal Statistical Society**, London, UK

05/2015 IS **SuStaIn i-like workshop, "Intractable Likelihoods"**, Bristol, UK

04/2015 IS, RV Faculty of Economics and Business, **KU Leuven**, Belgium

04/2015 IS **51st Gregynog Statistical Conference**, Powys, UK

03/2015 IS, RV Department of Statistics, **University of Padova**, Italy

03/2015 IS, RV Informatics and Statistics, **Ca' Foscari University**, Italy

02/2015 IS School of Mathematics, **University of Bristol**, UK

02/2015 IS School of Mathematical Sciences, **Queen Mary University of London**, UK

10/2014 IS School of Mathematics, Statistics and Actuarial Science, **University of Kent**, UK

06/2014 IS, RV Informatics and Statistics, **Ca' Foscari University**, Italy

11/2013 IS Department of Statistics, **LSE**, UK

10/2013 IS Department of Mathematics, **Imperial College London**, UK

05/2013 IS Department of Statistics, **University of Oxford**, UK

04/2013 IS, RV Department of Statistics, **Athens University of Economics and Business**, Greece

01/2013 IS, RV School of Computing Sciences, **University of East Anglia**

03/2013 ID **International Workshop on Recent Advances in Statistical Inference**, Padova, Italy  
 11/2012 IS Department of Statistics, **University of Vienna**, Austria  
 11/2012 IS School of Mathematics and Statistics, **Newcastle University**, UK  
 05/2012 IS, RV Faculty of Economics and Statistics, **Universität Innsbruck**, Austria  
 02/2012 IS **London School of Hygiene and Tropical Medicine**, UK  
 08/2011 RV Department of Statistics, **Harvard University**, USA  
 12/2010 IS School of Mathematics, **University of Southampton**, UK  
 11/2010 IS, RV Department of Economics, **Universitat Pompeu Fabra**, Spain  
 05/2010 IS School of Mathematical Sciences, **Queen Mary University of London**, UK  
 05/2009 IS, RV Department of Statistics, **University of Padova**, Italy  
 05/2006 IS, RV Department of Statistics, **Athens University of Economics and Business**, Greece

## CONTRIBUTIONS TO CONFERENCES, WORKSHOPS & PUBLIC EVENTS

07/2019 trackeRapp: An integrated shiny workflow for the analysis of running, cycling and swimming data. *useR! 2019 Conference, Toulouse, France*  
 07/2019 Making sense of CRAN: Package and collaboration networks. *useR! 2019 Conference, Toulouse, France*  
 05/2019 On your mark, get set, go! Data scientists making platforms for your exercise data. *Pint Of Science, London, UK*  
 09/2018 Beyond Beta regression: modelling bounded-domain variables in the presence of boundary observations. *RSS Conference 2018, Cardiff, Wales*  
 07/2016 Penalized likelihood inference in meta-regression. *31st IWSM, Rennes, France*  
 06/2016 brglm2: Reduced-bias inference in generalized linear models. *useR! 2016 Conference, Stanford, US*  
 12/2015 Beyond Beta regression: modelling percentages and fractions in the presence of boundary observations. *ERCIM 2013, London, UK*  
 07/2015 Linking the performance of endurance runners to training and physiology effects via multi-resolution elastic net. *Greek Stochastics  $\eta'$ , Crete, Greece*  
 07/2015 Beyond beta regression: modelling percentages and fractions in the presence of boundary observations. *30th IWSM, Linz, Austria*  
 06/2015 Linking the performance of endurance runners to training and physiology effects via multi-resolution elastic net. *MathSport International 2015, Loughborough, UK*  
 12/2014 Effects of bias on inference in the presence of nuisance parameters: case studies and questions. *ERCIM 2014, Pisa, Italy*  
 12/2013 Beyond Beta regression: modelling percentages and fractions in the presence of boundary observations. *ERCIM 2013, London, UK*  
 07/2013 Reduced-bias inference for multi-dimensional Rasch models. *28th IWSM, Palermo, Italy*  
 07/2012 Bias reduction in the estimation of Rasch models. *8th World Congress in Probability and Statistics, Istanbul, Turkey*  
 12/2011 Model-based clustering using copulas. *ERCIM 2011, London, UK*  
 08/2011 brglm: Bias reduction in generalized linear models. *useR! 2011 Conference, Coventry, UK*  
 08/2011 A generic algorithm for reducing bias in parametric estimation. *JSM, FL, US*  
 05/2011 Multinomial logit bias reduction via the Poisson log-linear model. *Greek Stochastics  $\gamma'$ , Crete, Greece*  
 09/2010 Supervised sampling for clustering large data sets. *RSS Conference 2010, Brighton, UK*  
 08/2010 On iterative adjustment of responses for the reduction of bias in categorical response models. *Greek Stochastics  $\beta'$ , Lefkada, Greece*  
 10/2009 Profiling the parameters of models with linear predictors. *ERCIM 2009, Limassol, Cyprus*  
 08/2009 Bias reduction in generalized nonlinear models. *JSM 2009, DC, US*  
 07/2009 On iterative adjustment of responses for the reduction of bias in binary regression. *24th IWSM, NY, US*  
 08/2008 Profiling the parameters of models with linear predictors. *useR! 2008 Conference, Dortmund, Germany*  
 07/2007 Penalized likelihood for a three-parameter Rasch model. *22nd IWSM, Barcelona, Spain*  
 07/2006 Bias reduction and shrinkage in multinomial logit models. *21st IWSM, Galway, Ireland*  
 07/2005 Bias reduction in ordinal response models. *25th EMS, Oslo, Norway*

## RESEARCH FUNDING AND FUNDING FOR RESEARCH ACTIVITIES

RC: Research Contract, RG: Research Grant, RS: Research Studentship, SE: Scientific Event, TVG: Travel/Visitor grant

PI: Principal Investigator, CI: Co-Investigator

G9. Theory & Methods Challenge Fortnights SE PI 01/2019 – funding for 2019-2023  
 The Alan Turing Institute

G8. Trusted Digital Infrastructure for Identity Systems The Alan Turing Institute	RG	PI	10/2020 – 10/2021	£85.0K
G7. Warwick Impact Fund Award University of Warwick	RG	PI	03/2018 – 03/2019	£11.0K
G6. Turing Fellowship The Alan Turing Institute	RG	PI	01/2018 – 08/2021	= 60% Warwick FTE
G5. Statistical assessment of Olympic athletes performance English Institute of Sport	RC	PI	02/2015 – 02/2017	£160.0K
G4. Automated approaches to athlete workload monitoring English Institute of Sport and EPSRC	RS	PI	09/2015 – 01/2019	£69.5K
G3. Turing Fellowship The Alan Turing Institute	RG	PI	09/2016 – 01/2018	= 40% UCL FTE
G2. "Data science for data-rich sport" workshop The Alan Turing Institute	SE	CI	11/2015	£14.0K
G1. Grant for international visitors UCL Big Data Institute	TVG	PI	08/2016	£2.5K

## AWARDS & SCHOLARSHIPS

06/2014	UCL's Mathematical and Physical Sciences (MAPS) Faculty Teaching Award for 2014
07/2007	Best student poster award in 22nd IWSM
10/2004 – 09/2007	EPSRC funding for tuition fees (PhD studies)
10/2004 – 09/2007	Warwick Postgraduate Research Fellowship (PhD studies)
2003–04, 2002-03, 2001-02	G Chalkiopoulos Foundation annual scholarship award for exceptional student performance

## TEACHING EXPERIENCE

U: Undergraduate level, G: Graduate level, P: PhD level

### Topics in statistics: Generalized linear models with large data

U University of Warwick Coventry, UK Term 2 2017-2018; 2018-2019; 2019-2020

### Scalable regression: old tricks, new era

P The Alan Turing Institute London, UK 05/2018

### Regression modelling with large data sets

P University of Padova Padova, Italy 05/2021  
P University of Bristol Bristol, UK 04/2021  
P University of Padova Padova, Italy 09/2020  
P University of Padova Padova, Italy 05/2018  
P University of Innsbruck Innsbruck, Austria 01/2017  
G Barcelona GSE Data Science Barcelona, Spain 11/2015; 10/2016

### Linear and generalized linear models

G Athens University of Economics and Business Athens, Greece 06/2014; 03/2015

### Further modelling with applications in health research: Proportional odds models

U, G University College London London, UK Term 2 2013–2015; 2014–2015

### Linear models and the analysis of variance

U University College London London, UK Term 1 2010–2011; 2011–2012; 2012–2013; 2013–2014; 2014–2015; 2015–2016

### Introduction to significance tests

G University College London London, UK Term 1 2011–2012; 2012–2013; 2013–2014; 2015–2016

### Introduction to practical statistics

U University College London London, UK Term 2 2010–2011

### Advanced topics in statistics: asymptotic statistics

U, G University of Warwick Coventry, UK Term 1 2009–2010



## COMPUTING SKILLS & LANGUAGES

Programming languages (in order of usage) R, Julia, Python, C, Mathematica  
Operating systems (in order of usage) Mac OS X, Linux, Windows  
Languages Greek (mother tongue), English, German

## ACADEMIC SUPERVISION

### Post-Doctoral Research Associates

Aristeidis Panos	first advisor	10/2020 – 10/2021
Thomas Bartlett	host advisory team	09/2016 – 09/2020
Gavin Whitaker	second advisor	11/2016 – 10/2018
Hannah Frick	first advisor	02/2015 – 02/2017

### Current PhD students

Oliver Kemp	first supervisor	started 08/2022
Philipp Sterzinger	first supervisor	started 09/2021
Patrick Zietkiewicz	first supervisor	started 09/2021

### Completed PhD students

Petya Kindalova	joint supervisor	viva 12/2021
Advances in statistical methods for large-scale binary-valued neuroimaging data		
Zhenzheng Hu	joint supervisor	viva 08/2021
Dirichlet process probit misclassification mixtures model for misclassified binary data		
Zhongzhen Wang	joint supervisor	viva 04/2021
Statistical modelling approaches with Bayesian tensor factorisations		
Asma Saleh	first supervisor	viva 02/2021
Reduced-bias estimation of some non-standard models		
Santhosh Narayanan	first supervisor	viva 06/2020
Bayesian modelling of flexible marked point processes with applications to event sequences from association football		
Alkeos Tsokos	first supervisor	viva 11/2019
Exploiting smoothness in regression and joint models		
Sophia Kyriakou	first supervisor	viva 05/2018
Reduced-bias estimation and inference for mixed-effects models		
Claudia Di Caterina	external supervisor	visited 09/2015 – 09/2016
Reducing the impact of bias in likelihood inference for prominent model settings		
Stylios Kampakis	joint supervisor	viva 06/2016
Predictive modelling of football injuries		
Emmanouil Karimalis	external supervisor	visited 09/2013 – 12/2014
Essays in multivariate modelling in Finance		

### Interns and visiting project students

2017 – 2018 (4): Robin Hornak (intern at University of Warwick; 07/2018 – 08/2018),  
Andrew McCormack (visiting from University of Toronto; 06/2018 – 07/2018),  
Alessandra Cabassi (intern at Turing Institute; 06/2018 – 09/2018),  
Junyang Wang (intern at Turing Institute; 06/2018 – 09/2018)

2015 – 2016 (3): Santhosh Narayanan (visiting from GSE Data Science; 06/2016 – 09/2016),  
Sarah Inman (visiting from GSE Data Science; 06/2016 – 09/2016),  
Alexia Calandras (visiting from ENSTA ParisTech; 05/2016 – 07/2016)

### MSc and M-level project supervision

2022 – 2023 (2): Deepthi Dokka, Nivi Sivanantharajah  
2021 – 2022 (2): Dylan Dijk, Janique Krasnowska  
2020 – 2021 (5): Mingcong Chen, Aaron O'Brien, Jack Osmond, Harry Rusdale, Fernando Zepeda

2019 – 2020 (8): Ilse Cuevas Andrade, Daniel Caplan, Chenglei Hu, Jane Jiang, Dimitra Kousi, Afentra Theocharous, Shannon Williams, Patrick Zietkiewicz  
2018 – 2019 (4): Ziyi Sun, Amy Wang, Declan Wardell, Yuliang Weng  
2017 – 2018 (4): Mingyu Chen, Ruijun Hou, Shuyang Wang  
Dimitrios Papadimitriou (Tukey prize for best MSc dissertation in the dept of Statistics)  
2016 – 2017 (1): Zhenzheng Hu  
2015 – 2016 (4): Sidney Bixer, Alberto Martin Izquierdo, Chenye Li, Edward Terry  
2014 – 2015 (2): Xiaolin Shen, Alkeos Tsokos  
2013 – 2014 (2): Kavya Jagan, Halil Halil  
2012 – 2013 (1): Jiancheng Chen  
2011 – 2012 (1): Yi Feng

### **BSc project supervision**

2022 – 2023 (2): Riccardo Romio, Shaun Yap  
2021 – 2022 (1): Ákos Szepesi  
2019 – 2020 (2): Ben Barlow, Jake Pagden  
2017 – 2018 (1): Robin Hornak (best final year project in the dept of Statistical Science)  
2015 – 2016 (1): Angus Chiu  
2014 – 2015 (2): Yijie Hu, Tongjin Zhang  
2013 – 2014 (3): Ian Lim, Yaqiao Zhang, Yijia Zhang  
2012 – 2013 (3): Anyi Zou, Rong Tu, Assiya Iskaliyeva  
2011 – 2012 (1): Martin Huber