Osvaldo Anacleto Junior

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Education

September 2009-December 2012: PhD in Statistics - The Open University, UK

Thesis Title: Bayesian dynamic graphical models for high-dimensional traffic flow forecasting

Supervisors: Dr Catriona Queen and Professor Paul Garthwaite

Funded by the Department of Mathematics and Statistics, The Open University.

2003-2005: MSc in Statistics - Federal University of São Carlos, Brazil

Dissertation Title: Graphical methodology for recurrent event data via bootstrap

Supervisor: Professor Francisco Louzada

Average Grade: 3.6/4

Funded by the National Council for Graduate Studies (CAPES).

1999-2002: BSc in Statistics - Federal University of São Carlos, Brazil

Funded by the National Council for Scientific and Technological Development (CNPq).

Additional Academic Training

Academy for PhD Training in Statistics (throughout 2010). Courses: statistical computing, statistical inference, statistical modelling, statistical asymptotics, applied stochastic processes, computer intensive statistics, spatial and longitudinal data analysis and nonparametric smoothing.

Academic Work Experience

The Roslin Institute, University of Edinburgh

Jan/2013 - present

Position: Research Fellow. Currently working on the development of novel statistical methods for understanding the genetic basis of infectious diseases. Also involved in other projects carried out by Andrea Doeschl-Wilson's group to assist with the development and application of statistical models to assess within and between host infection dynamics in genetically diverse livestock populations.

Federal University of São Carlos

Feb/2004 - Dec/2004

Position: Lecturer. Fully responsible for devising and delivering the following courses: statistical inference, probability and statistics and biostatistics. Duties included consulting services in statistics to researchers from different departments of the university.

Work Experience

Itaú Holding S/A, São Paulo - SP

Feb/2005 - Sep/2009

Last position: Research and Development Specialist. Duties included development and application of predictive statistical models and machine learning techniques to learn behaviour patterns from very large data sets of bank customers. Also responsible for supervising data analysts.

Constat/Data Analysis Consulting, São Carlos - SP

Mar/2003 - Dec/2004

Position: Statistical Consultant. Responsible for the development and application of predictive statistical models and machine learning techniques in projects from a variety of companies. Duties included developing and teaching advanced statistical courses for on-site training.

Awards

- Savage Award 2013 (Honourable Mention). Awarded by the International Society for Bayesian Analysis (ISBA) to outstanding doctoral dissertations in Bayesian econometrics and statistics
- Best application poster award at UseR! 2011 conference, University of Warwick, UK

Conference attendance awards:

- ISBA travel award to partially cover expenses for the ISBA 2014 conference in Mexico
- Travel and accommodation award: Structure and uncertainty: modelling, inference and computation in complex stochastic systems, University of Bristol (UK), 2012
- ISBA travel award to partially cover expenses for the ISBA 2012 conference in Japan
- Travel award: Statistical modelling and inference for networks, University of Bristol (UK), 2010

Service and Professional Activities

- Journal Reviewer: Journal of the American Statistical Association (2), Statistical Modeling, Journal of Applied Statistics, Statistical Papers, British Poultry Science and Genetics, Selection, Evolution
- Event Organizer: Statistics group research lunches, The Open University (2012)

Conference Presentations and Seminars

Invited talks:

- Department of Decision Sciences, Bocconi University (Italy), December 2016. Title TBC (seminar).
- XIII Brazilian Meeting on Bayesian Statistics, Belo Horizonte (Brazil), 2016: Bayesian hierarchical modelling of host genetic effects in disease transmission.
- 12th World Meeting of the International Society for Bayesian Analysis, Cancun (Mexico), 2014: Bayesian dynamic graphical models for high-dimensional time series.
- Brazilian Symposium on Probability and Statistics, Natal (Brazil), 2014: Using dynamic chain graphs to model high-dimensional time series.
- Technischen Universität Dortmund (Germany), 2013: Using dynamic chain graphs to model high-dimensional time series (seminar).
- 8th Bayesian Inference in Stochastic Processes Workshop, Milan (Italy), 2013: *Dynamic chain graph models for multivariate time series forecasting*.
- Universidade Federal de São Carlos (Brazil), 2012: Statistical models for road traffic flow forecasting (seminar).
- Universidade de São Paulo (Brazil), 2012: Dynamic graphical models for multivariate time series (seminar).
- University of Leeds (UK), 2011: Graphical dynamic models for road traffic networks (seminar).
- IV Applied Statistics Workshop, Federal University of São Carlos (Brazil), 2008: Applied statistics in the banking industry and essential characteristics of an applied statistician.
- Brazilian Symposium on Probability and Statistics, Águas de São Pedro (Brazil), 2008: Poly-bagging predictors for classification modeling on large data sets.
- 16th SAS User Group Meeting, São Paulo (Brazil), 2007: A survival analysis application on the customer value estimate.
- \bullet 1st Risk Modeling Workshop, Federal University of São Carlos (Brazil), 2005. A risk modelling application on the lifetime value.

Contributed talks:

- \bullet Edinburgh Alliance for Complex Trait Genetics 7^{th} meeting, Royal Society of Edinburgh, 2015: Identifying genetic superspreaders of infection
- Network Data Analysis Workshop (European Course in Advanced Statistics), Germany, 2015: Applying dynamic chain graph models to infer networks underlying time series gene expression data
- Statistical Systems Biology Workshop, Warwick, 2014: Incorporating contemporaneous relationships among gene expression time series into the model selection of gene networks
- 10th World Congress on Genetics Applied to Livestock Production, Vancouver, (Canada), 2014: Simultaneous Inference of Genetic Parameters Underlying Susceptibility and Infectivity of Livestock from Epidemiological Data
- 8th World Congress in Probability and Statistics, Istanbul (Turkey), 2012: Dynamic chain graph models for multivariate time series forecasting.
- OU Statistics' Research Students Day, Milton Keynes (UK), 2012: Modelling cross-time series covariances with chain graphs.
- Stochastik-Tage, Mainz (Germany), 2012: Graphical model representations of multivariate time series for road traffic flow forecasting.
- 4rd International Conference of the ERCIM Working Group on Computing & Statistics, London (UK), 2011: Graphical model representations of multivariate time series for road traffic flow forecasting.
- OU Statistics Research Students' Day, Milton Keynes (UK), 2011: Extending the multiregression dynamic model for short term traffic forecasting.
- \bullet 34rd Research Students' Conference in Probability and Statistics, Cambridge (UK), 2011: Graphical dynamic models for road traffic networks
- TRL/OU Student-Supervisor Forum, Transport Research Laboratory, Milton Keynes (UK), 2010: Statistical models for road traffic networks
- \bullet 33rd Research Students' Conference in Probability and Statistics, Warwick (UK), 2010: Bayesian forecasting models for traffic management systems
- TRL/OU Student-Supervisor Forum, Transport Research Laboratory, Berkshire (UK), 2009: *Modelling Traffic Networks*.
- Brazilian Symposium on Probability and Statistics, Águas de São Pedro (Brazil), 2008: A continuous non parametric lifetime value estimator.

Selected posters (5/14)

- Structure and uncertainty: modelling, inference and computation in complex stochastic systems, University of Bristol (UK), September 2012: Dynamic chain graph models.
- 11th World Meeting of the International Society for Bayesian Analysis, Kyoto (Japan), June 2012: Dynamic graphical models for real-time multivariate road traffic flow forecasting.
- The R User Conference (UseR! 2011), Coventry (UK), 2011. Forecasting multivariate time series of flows using the DLM package. (best application poster award-winning).
- Statistical Modelling and Inference for Networks (Statworks), University of Bristol (UK), 2010. Graphical dynamic models for road traffic networks.
- 9th Valencia International Meetings on Bayesian Statistics 9/ISBA 2010, Benidorm (Spain), 2010. Bayesian forecasting models for traffic management systems.

Professional Memberships

Royal Statistical Society (RSS), International Society for Bayesian Analysis (ISBA) and the Genetics Society

Language Skills

• English: Fluent

Portuguese: Native speaker German: Intermediate

Computer Skills

Statistical programming: R, SAS, Fortran
Applications: LATEX, MS/Open Office