Aidan Boland

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Personal Profile

Self motivated with broad-ranging practical work experience in demanding environments. Outgoing, energetic and committed with well-developed communication skills, able to liaise effectively with people at all levels, an enthusiastic team player and equally effective working independently.

Education

2011 - 2015	PhD. in Statistics, University College Dublin (UCD).
2010 - 2011	M.Sc. in Statistics (First Class Honours), UCD.
2006 - 2010	B.Sc. in Mathematical Science (Upper Second Class Honours), UCD.

Research Experience

2015 - 2016	Postdoctoral Researcher, University College Dublin. Project on product classification using machine learning. (Supervisor: Dr. Andrew Parnell).
2011 - 2015	PhD., University College Dublin. Title: 'Approximate Bayesian inference for doubly intractable distributions'. (Supervisor: Prof. Nial Friel).
2012	Research Project, AOL, Dublin. Three month study on spam search detection. (Supervisors: Prof. Nial Friel & Dr. Neil Hurley).
2010 - 2011	Master's Research Project, University College Dublin. Title: 'Supervised Probabilistic Classification'. (Supervisor: Prof. Nial Friel).

Peer Reviewed Publication

Alquier, P., Friel, N., Everitt, R. and Boland, A. (2014), 'Noisy Monte Carlo: convergence of Markov chains with approximate transitions kernels'. *Statistics and Computing*.

Papers in Preparation

Boland, A. and Friel, N., 'Efficient MCMC for Gibbs Random Fileds using pre-computation'.

Boland, A. and Friel, N., 'Approximate Bayesian Inference for large Gibbs Random Fields'.

Selected Presentations

'Efficient MCMC for Gibbs Random Fields using pre-computation', Scalable Monte Carlo workshop at Neural Information Processing Systems (NIPS) 2015 (Poster presentation).

'Pre-processing for Gibbs Random Fields', Conference on Applied Statistics in Ireland (CASI) 2015 (Oral presentation).

'Learning with subsets of the data', Insight Student Conference 2014 (Oral presentation).

'Noisy Monte Carlo Algorithms for Gibbs Random Fields', Research Students Conference (RSC), University of Nottingham 2014 (Oral presentation).

'Adaptive Bayesian Inference for Markov Random Fields', Conference on Applied Statistics in Ireland (CASI) 2013 (Poster Presentation).

Teaching and Consulting Experience

2016 - Present Lecturer, University College Dublin.

Lecturing an online undergraduate module titled 'Practical Statistics'.

This involves creating and delivering lectures, creating and grading assignments and exams, and co-ordinating tutors for computer labs in R and Minitab.

2010 - 2015 Tutor, University College Dublin.

Tutored undergraduate and postgraduate students over a broad range of courses including probability theory, actuarial statistics, Bayesian analysis, data programming and multivariate analysis.

Demonstrated and tutored computer practical classes (SAS, R and Minitab) of up to fifty students for both undergraduates and postgraduates.

Graded undergraduate and postgraduate assignments in addition to final examinations.

Created screencasts and administerd discussion boards for an online module: data programming with R.

2014 - 2015 Maths Support Centre (MSC), University College Dublin.

Provided mathematical and statistical support to students of various disciplines (the MSC is an informal drop-in centre available to all UCD students seeking help with mathematics or statistics).

Delivered lectures on selected 'hot topics' in statistics.

Summer 2011 Statistical Consultant, Centre for Support and Training in Analysis and Research (CSTAR).

Provided advice on study design and analysis for various health research studies.

Conducted statistical analysis and interpreted results for a diverse range of studies.

Courses Attended

Creative Thinking and Innovation, Innovation Academy, Dublin 2012.

Academy for PhD Training in Statistics (APTS), University of Cambridge (Prof. David Firth and Prof. Simon Wood) and University of Warwick (Prof. Brian Ripley) 2012.

MCMC, WinBUGS and Bayesian model selection, University College Dublin by Prof. Nial Friel and Prof. Ioannis Ntzoufras 2011.

Skills

Computer skills: R, Minitab, C and C++. Working knowledge in Python, SAS, SPSS and Genstat. Extensive knowledge of Microsoft Word, Excel, PowerPoint and LaTeX.

Networking, presenting, report writing and interpersonal skills: Developed through attending and presenting at conferences and workshops, writing my masters and PhD theses, and preparing papers for publication.

Teamwork and communication skills: Developed through participation in group projects during my undergraduate degree. The projects involved analysing data sets, presenting the results to staff and students and finally completing a detailed report.

Self-motivation and excellent work ethic: Work independently to overcome problems, manage large workload and plan nature of work.

Award

Student poster award, Conference on Applied Statistics in Ireland (2013).