

2016 - Present	<p>Data Scientist, Clavis Insight, O'Connell Bridge House, Dublin 2.</p> <p>Researching and implementing various statistical methods for use within eCommerce insights and analytics.</p> <p>Developed API in R using supervised classification to remove manual data input and QA testing.</p> <p>Created UI for data validation and for interactively correcting data defects.</p>
2016	<p>Lecturer, University College Dublin, Belfield, Dublin 4.</p> <p>Lecturing an online undergraduate module in the School of Mathematics and Statistics titled 'Practical Statistics'.</p> <p>Coordinated tutors and teaching assistants for computer labs in Minitab and R.</p>
2015 - 2016	<p>Postdoctoral Researcher, University College Dublin, Belfield, Dublin 4. & Clavis Insight, O'Connell Bridge House, Dublin 2.</p> <p>Researching text classification methods for use in e-commerce analytics.</p> <p>This project involved research into both supervised and unsupervised text classification methods with the aim of solving an industry specific problem.</p>
2010 - 2015	<p>Tutor, University College Dublin, Belfield, Dublin 4.</p> <p>Tutored undergraduate and postgraduate students over a broad range of courses including probability theory, actuarial statistics, Bayesian analysis, data programming and multivariate analysis.</p> <p>Demonstrated and tutored computer practical classes (SAS, R and Minitab) of up to fifty students for both undergraduates and postgraduates.</p> <p>Graded undergraduate and postgraduate assignments in addition to final examinations.</p> <p>Created screencasts and administered discussion boards for an online module: 'Data programming with R'.</p>
Summer 2012	<p>Statistical Consultant, AOL, Heuston South Quarter, Dublin 8.</p> <p>Undertook a three month study to create an algorithm to automatically detect spam searches on AOL's search engine.</p>
Summer 2011	<p>Statistical Consultant, CSTAR, University College Dublin, Belfield, Dublin 4.</p> <p>Carried out consultations and analysis for health sciences researchers.</p>
2008 - 2010	<p>I.T. Technician, Surfbox (Ormonde Technologies) Thomastown, Kilkenny.</p> <p>Maintained and installed Coin and Credit Card operated Internet terminals throughout Ireland. Constructed new terminals also.</p>

Education

- 2011 - 2015 **PhD. in Computational Statistics**
University College Dublin, Belfield, Dublin 4.
Title: 'Overcoming Intractable Likelihoods' (Supervisor: Prof. Nial Friel).
My research focused on improving simulation methods for estimating intractable likelihoods. The methods are applicable in area's such as spatial statistics and social network analysis.
- 2010 - 2011 **M.Sc. in Statistics (First Class Honours)**
University College Dublin, Belfield, Dublin 4.
Minor thesis: 'Supervised Probabilistic Classification' (Supervisor: Prof. Nial Friel).
Courses covered: Multivariate Analysis, Mathematical Statistics, Bayesian Analysis, Time Series Analysis, Applied Statistical Modelling, Data Programming, Monte Carlo Inference and Stochastic Models.
- 2006 - 2010 **B.Sc. Degree in Mathematical Science (Upper Second Class Honours)**
University College Dublin, Belfield, Dublin 4.
Courses included:
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| <u>Statistics</u> | Probability Distributions, Statistical Inference I, Biostatistics, Statistical Inference II, Survey Sampling, Linear Models I, Statistics & Visualisation, Linear Models II, Data Analysis I, Actuarial Statistics I, Nonparametric Statistics, Design of Experiments, Survival Analysis, Categorical Data Analysis, Data Analysis II and Linear Models with Complex Structures. |
| <u>Mathematics</u> | - Discrete Mathematics, Financial Mathematics, Vector Spaces and Coding, Calculus of Several Variables, Introduction to Analysis, Polynomial Rings/Group Theory, Functions of One Complex Variable, Differential Geometry and Advanced Linear Algebra. |
| <u>Mathematical Physics</u> | - Analytical & Quantum Mechanics, Vector Calculus, Introduction to Fluids & Waves, Partial Differential Equations and Dynamical Systems. |

Skills Acquired

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.

Computer skills: 9 years programming experience in the statistical language R (including the Shiny library), programming in C and C++. Extensive knowledge of L^AT_EX, Microsoft Word, Excel and PowerPoint. Working knowledge in SQL, HTML, Python, SAS, SPSS, Minitab and Genstat.

Teamwork and communication skills: Developed through participation in group projects during my undergraduate degree and also through playing rugby.

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

Awards

Graduate Statistician (GradStat), professional membership of the Royal Statistical Society.

Interests and activities

I enjoy all kinds of sport. I am particularly interested in rugby and currently play with Bective Rangers Football Club. I have also played at school level and represented my school in a Leinster Development Cup final. In addition, I enjoy playing golf and have represented Kilkenny Golf Club at Junior Level for which I hold two Leinster medals. Further interests include soccer, tag rugby and socialising with friends.