Dr Aidan Boland

SENIOR DATA SCIENTIST

⌂ aboland.ie | aboland | aidanboland | BolandAi

Data scientist with 4 years industry experience, and 5 years research experience.

Employment

Edge By Ascential (formerly Clavis Insight)
Dublin, Ireland

SENIOR DATA SCIENTIST
2018 - Present

- Leading Data Science for the Digital Shelf product within Edge By Ascential.
- Managing a team of data scientists.
- Consulting on cross brand projects in the wider Ascential organisation.

DATA SCIENTIST
2016 - 2018

- Researched and implemented various statistical methods for use within ecommerce insights and analytics.
- Developed API in R which uses supervised classification to remove manual data input and QA testing.
- Created suite of UI's tailored for specific tasks within the organisation, allowing users to interactively manage data and apply machine learning techniques to simplify problems.
- Supervised and delivered statistical analysis projects for clients.
- Co-supervised Trinity College Dublin final year students projects in the areas of machine learning and data analytics.

University College Dublin
Belfield, Dublin 4.

LECTURER - SCHOOL OF MATHEMATICS AND STATISTICS
Autumn 2019 & 2020

- Prepared and recorded lectures for an online postgraduate module titled 'Intro to Data Analytics'.
- Managed all continuous assessment and the final examination.

LECTURER - LOCHLANN QUINN SCHOOL OF BUSINESS
Spring 2019

- Delivered lectures for an undergraduate module titled 'Data Analysis for Decision Makers'.
- Helped to prepare, coordinate, and correct both the mid semester project and the final examination.

LECTURER - SCHOOL OF MATHEMATICS AND STATISTICS
Spring 2016

- Lectured an online undergraduate module titled 'Practical Statistics'.
- Coordinated tutors and teaching assistants for computer labs in Minitab and R.

Insight Centre for Data Analytics & Clavis Insight
Dublin , Ireland.

POSTDOCTORAL RESEARCHER
2015 - 2016

- Researched text classification methods for use in ecommerce analytics.
- Involved research into both supervised and unsupervised text classification methods with the aim of solving an industry specific problem.

University College Dublin
Belfield, Dublin 4.

TUTOR
2010 - 2015

- 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 administered discussion boards for an online module: 'Data programming with R'.

AOL
Heuston South Quarter, Dublin 8.

STATISTICAL CONSULTANT
Summer 2012

- Undertook a three month study to create an algorithm to automatically detect spam searches on AOL's search engine.

Education

University College Dublin

P<small>H</small>D <small>IN</small> C<small>OMPUTATIONAL</small> S<small>TATISTICS</small>   *2011 - 2015*

- Title: 'Overcoming Intractable Likelihoods' (Supervisor: Prof. Nial Friel).
- Improved simulation methods for estimating intractable likelihoods in area's such as spatial statistics and social network analysis.

University College Dublin

MS<small>C</small> <small>IN</small> S<small>TATISTICS</small> (F<small>IRST</small> C<small>LASS</small> H<small>ONOURS</small>)   *2010 - 2011*

- 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.

University College Dublin

BS<small>C</small> <small>IN</small> M<small>ATHEMATICAL</small> S<small>CIENCE</small> (U<small>PPER</small> S<small>ECOND</small> C<small>LASS</small> H<small>ONOURS</small>)   *2006 - 2011*

Technical Skills

P<small>ROGRAMMING</small>

- 10 years experience with R:
    - Code in daily use within a production environment.
    - Suite of UI applications developed using the Shiny library.
- Proficient in: Git, SQL (Postgres, MySQL), Snowflake, LaTeX, Docker.
- Familiar with: AWS, command line tools, Python, HTML, C, SAS, SPSS.

M<small>ETHODOLOGIES</small>

- In depth knowledge of many statistical and machine learning techniques, including but not limited to: regression, MCMC, time series, principal component analysis, Bayesian inference, non-parametric methods, logistic regression/max ent, random forests, neural networks, LDA, k-means, nearest neighbour classifiers.

Presentations

I<small>NVITED</small>

2020	**Shiny Dashboards**, RSS Annual Conference - Visualising Data with Dashboards Session
2019	**Data Scientist or Statistician?**, Young-ISA meeting (Young section of the Irish Statistical Association)

S<small>ELECTED</small> O<small>THERS</small>

2018	**An R Case Study: From Research to Production**, CASI (Conference on Applied Statistics in Ireland)
2017	**Using R to automate the classification of e-commerce products**, EARL Boston (Enterprise Applications of the R Language)
2015	**Efficient MCMC for Gibbs Random Fields using pre-computation**, Scalable Monte Carlo workshop at NIPS (Neural Information Processing Systems)

Publications

2018	**Boland, A.**, Maire, F., Friel, N., **Efficient MCMC for Gibbs Random Fields using pre-computation** (*Electronic Journal of Statistics*)
2014	Alquier, P., Friel, N., Everitt, R. and **Boland, A.**, **Noisy Monte Carlo: convergence of Markov chains with approximate transitions kernels** (*Statistics and Computing*)

Awards

2019	Shiny Contest - 'Honorable Mention' for Shiny app displaying real time public transport info for Dublin.
2016	Awarded Graduate Statistician (GradStat) status by The Royal Statistical Society.

Interests and Activities

I enjoy all kinds of sport. I am particularly interested in rugby, gaelic games, and golf. I played rugby until 2018, and I continue to play golf. I also enjoy exploring interesting datasets, developing R packages, and creating Shiny apps.