Samuel H Passmore

Researcher - Statistician - Programmer

www.sampassmore.com

I am broadly interested in the statistical modelling of inter-group behaviour. Understanding the relationships between groups is an important step in the development of a peaceful society. Specifically, I am interested in how we can quantify distance between groups, and whether this is a good predictor of inter-group predjudice. My research often uses quantitative statistical models from a variety of sources. I also enjoy looking at different fields for solutions to problems that may be applicable to my research. Key skills include:

- Experience with a wide range of statistical modelling methods
- Excellent data visualisation ability
- Clear and concise reporting skills

- Skilled statistical programmer (R, SPSS)
- Co-ordinated project management
- Self-motivated team member

Education

Master of Science in Psychology - First Class   Feb 2013 - Feb 2014
University of Auckland

Funded by the Royal Society Rutherford Fellowship through Associate Professor Quentin Atkinson. My thesis involved the review of a number of phylogentic methods that allow for shared ancestry as well as the geographic diffusion. I also applied these methods to human development and economic data in order to detect how these processes affected contemporary culture.

Bachelor of Science (Hons) - First Division, Second Class in Statistics   Feb 2012 - Nov 2012
University of Auckland

Researched new statistical methods for use in hospital comparison across New Zealand hospitals. An Honours year in New Zealand is a single post-graduate year which is a combination of taught classes and a research thesis.

Bachelor of Science in Statistics and Psychology   2009 - 2011
University of Auckland

Publications

Atkinson, Q., Coomber, T., **Passmore, S. H.**, Greenhill, S. J. & Kushnick, G. (*Submitted*) *Cultural and environmental predictors of pre-European deforestation on Pacific Islands.* Proceedings of the National Academy of Sciences.

Sookias. R., **Passmore, S. H.** & Atkinson, Q. (*Submitted*) *Deep Cultural Ancestry and the Wealth of Nations.* PLOS ONE.

Matthews. L, **Passmore, S. H.**, Richard, P., Gray, R. & Atkinson, Q. (*Submitted*). *Shared cultural history as a predictor of political and economic changes among nation states.* PLOS ONE.

Professional Experience

Junior Researcher at Pingar International   April 2015 - April 2016

Developed and researched new features for Pingar's flagship, text-analytics product DiscoveryOne. These largely revolved around machine learning. Also explored techniques to derive important relationships in the text through networks.

University of Auckland (*Staff*)   Jan 2012 - Jan 2015

Research Assistant - *School of Psychology*   Nov 2012 - Jan 2015

Statistician and author on a number of research projects modelling group-level human behaviours. Often using phylogenetic and geographical networks to account for interdependencies in the data. Required to provide advice on the benefits and costs of decisions for peer-reviewed papers. Responsible for coding and executing large-scale analysis. Relaying the day-to-day progress of simultaneous projects to a number of other researchers both within the university and internationally. Delivered clear statistical advice to a number of postgraduate and undergraduate students.

Planning Analyst - *Planning Department*   Nov 2013 - Jun 2014

Aided decision making for the Vice Chancellor's office by creating interactive financial models and informative data visualisations. Present methods and results of complicated models to technical and non-technical staff.

Undergraduate marker - *Department of Statistics*   Jan 2012 - Feb 2013

Marked undergraduate assignments in the department of statistics. Required time to be managed efficiently while ensuring quality was of the highest standard.

Market Analyst for Horizon Research   Dec 2011 - Jan 2014

Required to organise, analyse and report results of online opinion polls and surveys. Responsible for ensure data was representative of the population of interest.

NCEA Maths and Statistics tutor   Oct 2011 - present

Private tutor to students ranging in age from 13 to 18.

Professional Skills

Expert in R, Python and Excel. Proficient in SAS, SPSS, C# and SQL. Experience with Javascript.
Expert use of LaTeX.
Knowledgeable in the application of classical and bayesian statistical methods.
Clear and concise writing for both technical and non-technical reports.

Last updated: December 20, 2015