

Nicholas Tierney

PhD Candidate in Statistics at QUT

nicholas.tierney@gmail.com | [tierneyn](#) | [TierneyNicholas](#)

Currently I'm a PhD candidate in my 3rd year of a 4 year program through the Industry Doctoral Training Centre (IDTC) at the Queensland University of Technology and am due to finish in May 2017. My PhD project involves the statistical analysis of Occupational Health Surveillance data. Currently, there Bayesian statistical methods to Occupational Health Surveillance data

Education 2013– **Queensland University of Technology** PhD Statistics. Supervisors: Kerrie Mengersen, Fiona Harden, Maurice Harden
2008–12 **University of Queensland** B. PsychSc (Honours). Supervisor: Philip Grove
2010 **McGill University** Exchange semester

Papers 2016 **Tierney, NJ.** "S3 Methods: A Simple Guide." The R Journal. **In Preparation**
2016 **Tierney, NJ.** et al. "Using Decision Trees in Occupational Health Surveillance." Scandinavian Journal of Work, Environment, and Health. **In Preparation**
2016 **Tierney, NJ.** et al. "Case Study Questions and Answers: Approaches using Accessible Methodology." PlosOne. **In Preparation**
2015 **Tierney, NJ.** et al. "Using Decision Trees to Understand Structure in Missing Data." BMJ Open 5 (6). doi:10.1136/bmjopen-2014-007450

Posters 2015 "The Sharpest Tool in the Shed" **Tierney, NJ. et al.** Bayes on the Beach
2014 "Missingness, Mixtures, and Multiple Imputation" **Tierney, NJ. et al.** Bayes on the Beach
2015 "Integrating Occupational Hygiene, Medicine and Engineering in a Mining Context." Maurice Harden, Charles Steer, Fiona Harden, Geoff Butler, Kerrie Mengersen, **Nicholas Tierney**, Ann. Occup. Hyg., Vol. 59, No. Supplement 1, 1–47 doi:10.1093/annhyg/meu119

Contributed Talks 2014 **Tierney, N. J.,** et al. "Understanding Missing Data: The Use of Classification and Regression Trees, and Boosted Regression Trees ", ASC / IMS Meeting. Sydney, Australia
2016 **Tierney, N. J.,** "Be a Hawk Not a Turkey: How A Bird's Eye View can Streamline Data Analysis", Workshop Organised by Monash Business Analytics Team (WOMBAT). Melbourne Zoo, Melbourne, Australia.

Presentations 2016 "And Now You Can, Too!" Building an R Package from Scratch in R, BRAG, Brisbane, Australia
2015 STARS: "The Joy of Stats", QUT, Brisbane, Australia
2013–15 Industry Doctoral Training Centre (IDTC) Student Conferences, Various
2015 Using RMarkdown for Research BRAG, Brisbane, Australia
2015 Developing Bayesian Models for Ranking Academic Papers, Bayes on the Beach, Gold Coast, Australia
2013 Australian Science Media Centre: "Statistics for Journalists", Brisbane, Australia

Awards 2013–17 APA (\$24,500 Annually for 4 years) ; IDTC Top Up (\$10,000 Annually for 4 years)
2016 SSAI Fully sponsored position at "Science Meets Parliament", Canberra, Australia
2015 Sessional Teaching and Reflection Showcase (STARS) **Overall University Winner**
2015 Vice-Chancellor's Performance Award for innovation in teaching in SEB113 (\$2,500)
2014 Honourary Life member of the University of Queensland Mountain Club (UQMC)

Teaching 2015 **SEB113** Taught workshops and created lab materials using RMarkdown and video

Volunteering 2013– SSAI Assistant Chair of Biostatistics
2013– SSAI Young Statisticians Representative for Queensland
2014 Meeting Chair for Bayesian Research and Applications Group (BRAG), QUT

Extra-Curricular 2015– Archivist and Magazine Editor of UQMC
2014– Master of Ceremonies of State and National Climbing Championships
2014, 12 Executive Committee of UQMC
2007–09 Volunteer at Edmund Rice Camps

Projects

Blog 2013– I maintain a personal blog - [njtierney.com](#) - to share code and statistics, and to engage in dialogue with the statistics and r-programming communities

R packages 2016-
2015-
2014-
visdat: Visualise a whole dataframe at once
ggmissing: Extend ggplot to account for missing data
neato: Utility functions for decision trees and missing data

References PhD
PhD
Honours
Teaching
Professor Kerrie Mengersen k.mengersen@qut.edu.au
Dr. Fiona Harden fiona.harden@qut.edu.au
Dr. Phillip Grove p.grove@uq.edu.au
Dr. Sam Clifford samuel.clifford@qut.edu.au

Technical skills
R
STATA
JAGS
LaTeX
GitHub
Machine Learning
Bayesian Statistics
Data visualisation
Reproducible Reporting