

THOMAS JOEL FARRAR

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PERSONAL PROFILE

I am an experienced statistician and academic. I have published and presented research spanning several disciplines, and hold qualifications in Statistics (Masters), Mathematics Integrated with Computer Applications (Honours) and Theology (Honours). I am a Canadian national with permanent residence status in South Africa.

EDUCATION

2019 – present, PhD candidate in Statistical Sciences, University of Western Cape, South Africa (approved research topic: Heteroskedasticity diagnostics in the linear regression model)

2012 – 2017, Bachelor of Theology (Hons.), University of Chester, United Kingdom

2006 – 2007, Master of Mathematics in Statistics, University of Waterloo, Canada (Research paper title: *A two-sample nonparametric multivariate dispersion test based on data depth*)

2002 – 2006, Bachelor of Science (Hons.), Mathematics integrated with Computer Applications, Brock University, Canada (recipient of Governor General's Silver Medal, awarded to the undergraduate who achieves the highest academic standing within a Canadian university upon graduation from a bachelor degree program)

EMPLOYMENT

2018 – present	Senior Lecturer – Statistics
2012 – 2018	Lecturer – Statistics Department of Mathematics and Physics Cape Peninsula University of Technology, Bellville, South Africa

- Teaches statistics courses in Diploma (2013 – present) and Advanced Diploma (2020 – present) programmes in Mathematical Sciences
- Work Integrated Learning Coordinator for Diploma (2013 – present) and Advanced Diploma (2020 – present) programmes in Mathematical Sciences
- Service Learning Coordinator for Mathematical Sciences (2016 – 2018)
- Founding secretary of Mathematical Sciences Advisory Committee (2015 – 2018)
- Project coordinator and technical report main author for recurring contract research project (customer satisfaction survey for Golden Arrow Bus Services; 2014 – present)
- Member of curricula committee for Diploma and Advanced Diploma in Mathematical Sciences; co-convenor of curricula committee for Postgraduate Diploma in Mathematical Sciences
- Occasionally deputising for Head of Department at meetings (2018 – present)
- Co-supervisor of Masters students in Biotechnology (2017 – present) and Emergency Medical Care (2019 – present)
- Member of Research Ethics Committee, Faculty of Applied Sciences (2018 – present)

2012 Statistics Coach
Graduate School of Business, University of KwaZulu-Natal

- Assisted lecturer with delivery of an MBA statistics module by convening small-group tutorial sessions
- Guided students with statistical design and analysis for their MBA dissertation

2008 – 2012 Monitoring and Evaluation Officer
The Africaid Trust, Durban, South Africa

- Designed and implemented a monitoring and evaluation system for the WhizzKids United HIV/AIDS prevention, care, treatment and support programme
- Engaged with external partners to improve the quality of data and research on this programme
- Wrote technical reports for internal use (quality improvement) and for external stakeholders such as donors and partner organisations

SKILLS

Software and programming skills include the following:

- Advanced proficiency with R programming language and statistical software, including development of a package for the software called skedastic
- Advanced proficiency with R Markdown, Sweave, and LaTeX for generating dynamic, reproducible academic documents and statistical reports
- Advanced proficiency with R exams package and exams2blackboard functionality for generating dynamic and randomisable online assessments
- Proficient with SAS Enterprise Guide and competent with Base SAS programming
- Proficient with SPSS user interface
- Proficient with Microsoft Office suite (Word, Excel, Outlook, PowerPoint)
- Past programming experience with MATLAB, Maple, C++, VisualBasic.NET, FORTRAN, Java, and HTML

Interpersonal and communication skills include the following:

- Advanced proficiency in academic and technical writing
- Excellent public speaking skills
- Strong pedagogical skills (completed Teaching Development Programme at CPUT, 2013)
- Human language skills as follows:
 - English (native speaker)
 - isiZulu (good working knowledge)
 - French (good working knowledge)
 - isiXhosa (working knowledge)

Other professional skills include teamwork, time management, and project management.

RESEARCH PUBLICATIONS: STATISTICS AND NATURAL SCIENCES

Farrar, T.J. 2021. *skedastic: Heteroskedasticity Diagnostics for Linear Regression Models (R Package version 1.0.3)*. [Software]. University of the Western Cape. Bellville, South Africa. <https://cran.r-project.org/package=skedastic>.

Erdogan, I.G., Fosso-Kankeu, E., Ntwampe, S.K.O., Waanders, F.B., Hoth, N., Rand, A., & Farrar, T.J. 2019. Households water quality in O’Kiep-South Africa and community perception of related health risks. *Desalination and Water Treatment*, 167:145-155.

Farrar, T.J., Abiodun, G.J., & Farmer, J. 2019. A 2018 Customer Satisfaction Survey with Users of a Subsidised Private Bus Service in Cape Town, South Africa. *Proceedings of the Annual Southern African Transport Conference*, 38: 1-12.

Farrar, T.J., Falake, K.A., Mebaley, A., Moya, M.D., & Rudolph, I.I. 2019. A Mall Intercept Survey on Religion and Worldview in the Cape Flats of Cape Town, South Africa. *Journal for the Study of Religion*, 32(1):1-30.

Farrar, T.J. 2018. An Omnibus Test for Heteroscedasticity using Radial Stationarity and Data Depth. *Proceedings of the Annual Conference of the South African Statistical Association*, 60:1-8.

Farrar, T., Abiodun, G., & Farmer, J. 2018. Customer Satisfaction Survey for Golden Arrow Bus Services: 10-14 September 2018. Technical report, commissioned by Golden Arrow Bus Services, Cape Town, South Africa.

Omores, R.A., Wewers, F., Ikhide, P.O., Farrar, T., & Giwa, A. 2017. Spatio–Temporal Distribution of Polycyclic Aromatic Hydrocarbons in Urban Soils in Cape Town, South Africa. *International Journal of Environmental Research* 11:189-196.

Farrar, T. & Abiodun, G. 2016. Customer Satisfaction Survey for Golden Arrow Bus Services: 9-13 May 2016. Technical report, commissioned by Golden Arrow Bus Services, Cape Town, South Africa.

Farmer, J., Farrar, T., & Mtemeri, N. 2014. Customer Satisfaction Survey for Golden Arrow Bus Services: 12-16 May 2014. Technical report, commissioned by Golden Arrow Bus Services, Cape Town, South Africa.

Balfour, L., Farrar, T., McGilvray, M., Wilson, D., Tasca, G.A., Spaans, J.N., Mathews, C., Maziya, L., Khanyile, S., Dalgleish, T.L., & Cameron, W.D. 2013. HIV prevention in action on the football field: the WhizzKids United program in South Africa. *AIDS and Behavior*, 17:2045-2052.

Chenouri, S., Small, C.G., & Farrar, T.J. 2011. Data depth-based nonparametric scale tests. *Canadian Journal of Statistics*, 39:356-369.

Yuen, W.K., Farrar, T.J., & Rothstein, S.M. 2007. No-compromise reptation quantum Monte Carlo. *Journal of Physics A: Mathematical and Theoretical*, 40:F639.

RESEARCH PUBLICATIONS: BIBLICAL STUDIES

Farrar, T.J. 2019. New Testament Satanology and Leading Suprahuman Opponents in Second Temple Jewish Literature: A Religio-Historical Analysis. *Journal of Theological Studies*, 70:21-68.

Farrar, T.J. 2018. The Intimate and Ultimate Adversary: Satanology in Early Second-Century Christian Literature. *Journal of Early Christian Studies*, 26:517-546.

Farrar, T.J. 2018. Satanology and Demonology in the Apostolic Fathers: A Response to Jonathan Burke. *Svensk Exegetisk Årsbok*, 83:156-191.

Farrar, T.J. 2017. Today in Paradise? Ambiguous Adverb Attachment and the Meaning of Luke 23:43. *Neotestamentica*, 51:185-207.

Farrar, T.J. & Williams, G.J. 2016. Talk of the Devil: Unpacking the Language of New Testament Satanology. *Journal for the Study of the New Testament*, 39:72-96.

Farrar, T.J. & Williams, G.J. 2016. Diabolical Data: A Critical Inventory of New Testament Satanology. *Journal for the Study of the New Testament*, 39:40-71.

BOOK REVIEWS

Farrar, T.J. [Forthcoming]. *Demons and Spirits in Biblical Theology: Reading the Biblical Text in Its Cultural and Literary Context*, by John H. Walton & J. Harvey Walton. Reviewed in *Journal of Theological Studies*. DOI: 10.1093/jts/flab009.

Farrar, T.J. 2020. *The Satan: How God's Executioner Became the Enemy*, by Ryan E. Stokes. Reviewed in *Journal of Theological Studies*, 71:322-327.

CONFERENCE PRESENTATIONS

Farrar, T. 2020. Web Scraping in R: A Practical Introduction. Presented at StatCon 2020 online conference, Multivariate Data Analysis Group, North West University, 9 November-2 December 2020. <http://natural-sciences.nwu.ac.za/statcon-2020>

Farrar, T., Blignaut, R., Luus, R., & Steel, S. 2019. skedastic: An R Package for Heteroskedasticity Diagnostics in Linear Regression. Presented at South African Statistical Association Conference, Port Elizabeth, South Africa, 27-29 November 2019.

Farrar, T.J. 2018. When is the ideal time to play the South African National Lottery's LOTTO Game? Presented at South African Statistical Association Conference, Johannesburg, South Africa, 26-29 November 2018.

Farrar, T.J. 2012. Integration of a Soccer-Based HIV Prevention Programme into Intermediate Phase Life Orientation Curriculum. Presented at South Africa Basic Education Conference, Durban, South Africa, 2-4 April 2012.

Farrar, T.J. 2011. Quantitative Methods for Evaluating Behavioural HIV Prevention. Presented at International AIDS and STIs in Africa Conference, Addis Ababa, Ethiopia, 4-8 December 2011.

Farrar, T.J. 2011. On the Ball: Evaluating the WhizzKids United soccer-based youth HIV prevention programme in northern eThekweni. Presented at Social Aspects of HIV & AIDS Research Alliance Conference, Port Elizabeth, South Africa, 29 November-2 December 2011.

Farrar, T.J. 2011. A Mixed Gender Football League for Adolescents in Edendale, South Africa to Promote Gender Equality and Increase Uptake of HCT. Presented at South African AIDS Conference, Durban, South Africa, 7-10 June 2011.

Farrar, T.J. 2010. Inspired Play: A Case Study of a Soccer-Based HIV Prevention Programme Motivated by the 2010 FIFA World Cup. Presented at International Sport and Development Conference—Beyond 2010, Bellville, South Africa, 1-3 September 2010.

Farrar, T.J. Winning Tactics for 2010: Using Soccer to Facilitate Behavioural HIV Prevention for Youth with a Focus on Gender Equality. Presented at South African Sociological Association Congress, East London, South Africa, 13-16 June 2010.

Farrar, T.J., McGilvray, M., Campbell, C., & Campbell, C. 2009. WhizzKids United and HIV Prevention for Adolescents: Utilising the Power of Football for HIV Prevention in KwaZulu-Natal. International AIDS Impact Conference, Gaborone, Botswana, 22-25 September 2009.

CURRENT AND FUTURE RESEARCH INTERESTS

I am interested in heteroskedasticity diagnostics in linear regression models, applications of depth functions in statistical hypothesis testing, computational statistics, and applications of text mining in biblical studies.

REFEREES

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Relationship: Corporate liaison at Golden Arrow Bus Services concerning a recurring contract research project.