

Joseph Alexander Wilson

Statistical and Data Analyst, Stats NZ Christchurch New Zealand +64 204 075 0547
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Technical skills

- Software development: Linux, GIT, Julia, R, Python, SQL, package authoring, data science
- Web development: JavaScript, React, static site creation with Jekyll
- Graphic design: Scientific typesetting with LaTeX, Typst, Quarto

Education

- Maintained A+ across all qualifications
- 2021–2022: Master of Science with Distinction, VICTORIA UNIVERSITY OF WELLINGTON
Thesis [Geometric Algebra for Special Relativity and Manifold Geometry](#) supervised by Dr. Matt Visser.
- 2020: Postgraduate Certificate in Science, UNIVERSITY OF CANTERBURY
Literature review [An Overview of the Strong CP Problem and Axion Cosmology](#) supervised by Dr. Jenni Adams.
- 2017–2019: Bachelor of Science with First Class Honours, UNIVERSITY OF CANTERBURY
Honours project [Asymptotic Structure and Symmetries of FLRW Universes](#) supervised by Dr. David Wiltshire. GPA 9.0.

Work experience

- References available on request
- 2022–present: Statistical and Data Analyst, STATISTICS NEW ZEALAND
Contributions in the Research and Development Hub:
 - Technical leader in the Statistical Computing Network, leader of R FOR DATA SCIENCE book club.
 - Designed and developed the *admin household dataset*, authoring R packages for query caching and composable SQL generation.
- 2021: Tutor and lab demonstrator, VICTORIA UNIVERSITY OF WELLINGTON
- 2020: Tutor and teacher's assistant, UNIVERSITY OF CANTERBURY

Publications

- 2021: [Explicit BCHD formula for Spacetime via Geometric Algebra](#)
Article in the INT. J. OF GEOMETRIC METHODS IN MODERN PHYSICS, co-author Dr. Matt Visser.

Awards

- Wellington Master's by Thesis Scholarship (15kNZD and tuition fees)
- Vice-Chancellor's Excellence Award (fees for extra course outside own field)
- University of Canterbury Senior Scholarship (2kNZD)
- University of Canterbury Mathematics & Statistics Scholarship (3kNZD)
- New Zealand Institute of Physics Prize
- Madam Tiong Guok Hua Memorial Prize in Science (3,750NZD)