

James Hogg

PHD STUDENT

School of Mathematical Sciences, Queensland University of Technology

✉ james.hogg@hdr.qut.edu.au | 📷 JamieHogg-depo | 🌐 jamieahogg | 🐦 JamieAHogg



I am a statistician currently studying for a PhD in the School of Mathematical Sciences at the Queensland University of Technology (QUT). Focused on generating small area level estimates of cancer risk factors for the globally recognized Australian Cancer Atlas, my research is driven by a passion for making research more accessible, as well as a commitment to utilizing Bayesian inference and spatial modeling to enhance the field of cancer research. My teaching experience, together with the awards I've received for presentations and invited talks, attest to my proficiency in conveying complex statistical ideas to a wide audience. With my dedication to advancing the field of cancer research and a deep-seated enthusiasm for exploring the potential of Bayesian inference and spatial modeling, I am poised to make a significant contribution to either academic or industry roles.

Research interests

R, tidyverse, Stan
Spatio/hierarchical modelling
Bayesian inference
Spatial variation in cancer outcomes
Visualisations/mapping

Education and qualifications

Doctor of Philosophy, Statistics

QUEENSLAND UNIVERSITY OF TECHNOLOGY (QUT)

- PhD funded by the internationally-awarded Australian Cancer Atlas

Brisbane, Australia

2021 (ongoing)

Graduate Statistician (Gstat) Accreditation

STATISTICAL SOCIETY OF AUSTRALIA

2021 (ongoing)

Master of Biostatistics

UNIVERSITY OF QUEENSLAND (UQ)

- Provided by the Biostatistics Collaboration of Australia
- GPA: 7.0
- Dean's Commendation for Academic Excellence (2018 & 2019)
- Thesis complete at Cancer Council Queensland

Virtual

2018-2020

Bachelor of Music with Distinction

QUEENSLAND UNIVERSITY OF TECHNOLOGY (QUT)

- Minor in statistics (4 units)
- GPA: 6.5
- Dean's Award for Excellence (all 6 semesters)

Brisbane, Australia

2015-2017

Employment

Research assistant (part-time)

DEPARTMENT OF HEALTH, WESTERN AUSTRALIA (DoHWA)

- Consulting on bayesian modelling

Virtual

November 2022 (ongoing)

Instructor/presenter of Bayesian training

DEPARTMENT OF HEALTH, WESTERN AUSTRALIA (DoHWA)

- Three days of intensive training on Bayesian spatial temporal analysis

Perth, Australia

November 2022

Internship (full-time)

DEPARTMENT OF HEALTH, WESTERN AUSTRALIA (DoHWA)

- Project: Bayesian modelling
- Supervisors: Dr Susanna Cramb, Dr Alex Xiao
- Recommended spatio-temporal models for a wide range of health data
- Provided lengthy and detailed reports giving the details of spatio-temporal models
- Created detailed and large R code scripts to run a variety of models
- Created training materials for 3-days of intensive Bayesian spatio-temporal course

Virtual

August - November 2022

Research assistant (part-time)

QUEENSLAND UNIVERSITY OF TECHNOLOGY (QUT)

- Project: Modifiable areal unit problem (MAUP) in disease mapping
- Co-investigators: Dr Susanna Cramb, Ass. Prof. Helen Thompson

Brisbane, Australia

October 2021 - March 2022

Tutor (casual)

QUEENSLAND UNIVERSITY OF TECHNOLOGY (QUT)

- Course title: Quantitative Skills for Health Scientists (LQB286)

Brisbane, Australia

September - November 2021

Marking (casual)

UNIVERSITY OF QUEENSLAND (UQ)

- Course title: Categorical Data and Generalised Linear Models (STAT7608)
- Course title: Regression Modelling 2 (STAT7619)
- Course title: Applied Regression Analyses (PUBH7631)

Virtual

July 2021 - October 2022

Professional service

Co-chair of Bayesian Research and Applications group (BRAG)

QUEENSLAND UNIVERSITY OF TECHNOLOGY (QUT)

- Organiser of fortnightly internal talks on Bayesian research

Brisbane, Australia

June 2022 (ongoing)

Organiser and host

STANCONNECT 2022: STAN THROUGH SPACE AND TIME

- 10 speakers from 8 countries
- Over 100 virtual attendees

Virtual

July - November 2022

Master's Thesis

CANCER COUNCIL QUEENSLAND

- Title: "Influence of individual- and area-level socioeconomic factors on breast cancer stage at diagnosis: A multilevel approach"

Virtual

March - October 2020

Selected research presentations

Short talk

SPARSE SYMPOSIUM

- Title: Risk factors and the Australian Cancer Atlas: the trepidation of instability and sparsity in small area estimation

Virtual

November 2022

Short talk

SECOND EARLY CAREER RESEARCHER CANCER EPIDEMIOLOGY CONFERENCE

- Title: Risk factors and the Australian Cancer Atlas: the trepidation of instability and sparsity in small area estimation

Virtual

November 2022

Poster presentation

CENTRE FOR DATA SCIENCE SHOWCASE

- Title: Searching for stability in Bayesian small area estimation of proportions

QUT, Brisbane, Australia

September 2022

Poster presentation

INTERNATIONAL SOCIETY OF BAYESIAN ANALYSIS (ISBA) WORLD MEETING

- Title: Introducing a Bayesian two-stage logistic-normal model for small area estimation of proportions

Montreal, Canada

June 2022

Poster presentation

THE BAYESIAN YOUNG STATISTICIANS MEETING

- Title: Introducing a Bayesian two-stage logistic-normal model for small area estimation of proportions

Montreal, Canada

June 2022

Short talk

QANZIAM CONFERENCE

- Title: Searching for stability in Bayesian small area estimation of proportions

QUT, Brisbane, Australia

June 2022

Contributed talk

SMALL AREA ESTIMATION, SURVEYS AND DATA SCIENCE

Virtual

May 2022

- Title: Searching for stability: Introducing a method of small area estimation for proportions using severely sparse data

Short talk

Moreton Island, Australia

ACEMS FINAL RETREAT

November 2021

- Title: Modelling cancer risk factors in Australia

Short talk

QUT, Brisbane, Australia

QUT HIGHER DEGREE RESEARCH ACADEMY EVENT

July 2021

- Title: Modelling cancer risk factors and incidence in Australia

Awards

Best Oral Presentation Award

SECOND EARLY CAREER RESEARCHER CANCER EPIDEMIOLOGY CONFERENCE

November 2022

Honourable Mention for Best Student Presentation

QANZIAM CONFERENCE

June 2022

QUT Centre for Data Science and Cancer Council QLD Scholarship

DOCTOR OF PHILOSOPHY, STATISTICS

April 2021

- \$30,000 p.a. for 3.5 years during PhD studies.

Star Graduate

MASTERS OF BIOSTATISTICS

December 2020

Professional memberships

Statistical Society of Australia (SSA)

International Society of Bayesian Analysis (ISBA)

Centre for Data Science (CDS)

Health Equity Research with Outcomes (HERO)

Software

R, Stata, Python

MS Office Suite, Latex, Endnote, Mendeley

Git Bash

Stan, WinBUGS, JAGS