



Todd M. Ellis

DATA ANALYST & STATISTICAL PROGRAMMER

Greater Hobart Region, Tasmania, Australia

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PROFESSIONAL SUMMARY

I'm a data analyst and early career researcher with a varied background in forest ecology, pyrogeography, climate change, geospatial science, and higher education. I've worked as an analyst and researcher in a variety of laboratory, field, and office settings throughout the United States and Australia. Over the course of my career, I've developed novel mathematical tools and statistical models; maintained relational databases and statistical packages used for conducting data analysis and producing standardized reports; trained countless staff, students, and volunteers in institutional policies and procedures, as well as methodological approaches to statistical analysis; and managed both complex and transformative projects for higher education, government agencies, and private industry. My research has been published in high-impact, peer-reviewed journals, and I'm also skilled at conveying complex data and information to both casual and experienced stakeholders.

EDUCATION

Doctor of Philosophy, Biological Sciences

UNIVERSITY OF TASMANIA

Sandy Bay, TAS, Australia

2019 - present

Master of Science, Geography

WESTERN WASHINGTON UNIVERSITY

Bellingham, WA, USA

2013 - 2016

Bachelor of Science, Physical Geography and Geology

TEXAS STATE UNIVERSITY

San Marcos, TX, USA

2007 - 2012

PROFESSIONAL EXPERIENCE

Data Insights Analyst

UNIVERSITY OF TASMANIA: DIVISION OF FUTURE STUDENTS (FULL-TIME)

Sandy Bay, TAS, Australia

2023-01 - present

- Managing the development and implementation of a transformative statewide program to improve equity of access to higher education
- Leading the development of statistical models and reporting tools for managing offers and course quotas
- Streamlining and automating the higher education admissions system for school leavers
- Providing insights and consultations to institutional and external stakeholders

Adjunct Researcher

UNIVERSITY OF TASMANIA: COLLEGE OF SCIENCES AND ENGINEERING (FULL-TIME)

Sandy Bay, TAS, Australia

2023-09 - 2023-03

- Developed complex data-processing and analysis pipelines using high-performance computing and big data
- Oversaw multi-year project design and implementation addressing wildfire and global climate change challenges
- Managed custom platform for interactive web-mapping, on-the-fly statistical analyses, and novel data visualisation
- Collaborated with national and international research teams tackling climate change risk and mitigation

Data Analyst

UNIVERSITY OF TASMANIA: DIVISION OF FUTURE STUDENTS (PART-TIME / FULL-TIME)

Sandy Bay, TAS, Australia

2021-02 - 2023-01

- Developed statistical models and tools for meeting target university milestones
- Managed design and implementation of broad-scale university ML models for directing future university marketing, funding, and course creation
- Designed and implemented programming and data analytics training seminars for institution staff
- Oversaw development of internal reporting and statistical packages

Sustainability Analyst

UNIVERSITY OF TASMANIA: DIVISION OF FUTURE STUDENTS (CASUAL)

Sandy Bay, TAS, Australia

2019-10 - 2021-02

- Processed, analysed, and reported data to promote and review institution programmes
- Developed pipelines for automating data cleaning and collation
- Prepared data and briefings for global institution rankings
- Promoted nation-wide sustainability targets using data dashboards and reports

Data & GIS Analyst

Austin, TX, USA

APEX SYSTEMS: APPLE, INC. (CONTRACT)

2018-12 - 2019-05

- Developed and standardised data-processing methods for vector and multispectral raster datasets
- Managed and processed corporate GIS databases using data-driven software and programming languages
- Prepared statistical summaries, models, and analytical reports
- Led research and development projects to define novel methodologies for geospatial data

Faculty Research Assistant

Wenatchee, WA, USA

OREGON STATE UNIVERSITY: USDA FOREST SERVICE FORESTRY SCIENCES LABORATORY (CONTRACT)

2017-11 - 2018-06

- Converted complex data and findings into academic and government reports
- Developed explanatory models for sustainable forest management under climate change
- Created and maintained relational databases for government research
- Gathered and analysed ecological data using statistical software

CONSULTING

- 2020-08 **Predicting fire behaviour using historical satellite imagery**
Frontier Development Lab
- 2019-06 **Post-fire logging effects on reburn severity**
USDA Forest Service
- 2018-08 **Restoration treatment effects on ponderosa pine growth sensitivity to climate**
USDA Forest Service

HONOURS

- 2022-11 **Future Students Staff Excellence 2022 Sustainability Award**
University of Tasmania
- 2021-10 **NSW Environment, Energy and Science (DPIE) Eureka Prize for Applied Environmental Research**
Australian Museum
- 2021-09 **Future Students Staff Excellence 2021 Sustainability Award**
University of Tasmania
- 2021-08 **Certifi-Cat of Appreciation**
Ten Lives Cat Centre
- 2019-09 **Tasmania Graduate Research Scholarship (3.5x)**
NSW Bushfire Risk Management Research Hub
- 2019-09 **NSW Bushfire Risk Management Research Hub Top-Up (3.5x)**
NSW Bushfire Risk Management Research Hub
- 2018-06 **Best Fish and Wildlife Science**
Washington Department of Fish and Wildlife

VOLUNTEER EXPERIENCE

Foster Parent

Hobart, TAS, Australia

TEN LIVES CAT CENTRE

2020-05 - present

Animal Handler

New Braunfels, TX, USA

HUMANE SOCIETY OF THE NEW BRAUNFELS AREA

2018-08 - 2019-01

Animal Handler

Wenatchee, WA, USA

WENATCHEE VALLEY HUMANE SOCIETY

2018-03 - 2018-08

Technology Tutor

Wenatchee, WA, USA

NORTH CENTRAL REGIONAL LIBRARY

2018-01 - 2018-08