Todd M. **Ellis**

DATA ANALYST & STATISTICAL PROGRAMMER
Greater Hobart Region, Tasmania, Australia
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PROFESSIONAL SUMMARY

I'm a data analyst and scientist with a background in forest ecology, physical geography, and higher education. I've worked as an analyst in a wide variety of laboratory, field, and office settings across 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; and managed complex and critical projects. 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   *Sandy Bay, TAS, Australia*
UNIVERSITY OF TASMANIA   *2019 - present*

Master of Science, Geography   *Bellingham, WA, USA*
WESTERN WASHINGTON UNIVERSITY   *2013 - 2016*

Bachelor of Science, Physical Geography and Geology   *San Marcos, TX, USA*
TEXAS STATE UNIVERSITY   *2007 - 2012*

PROFESSIONAL EXPERIENCE

Data Insights Analyst   *Sandy Bay, TAS, Australia*
UNIVERSITY OF TASMANIA: DIVISION OF FUTURE STUDENTS (FULL-TIME)   *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   *Sandy Bay, TAS, Australia*
UNIVERSITY OF TASMANIA: COLLEGE OF SCIENCES AND ENGINEERING (FULL-TIME)   *2019-09 - 2023-03*

- Developed complex data-processing and analysis pipelines using high-performance computing and big data
- Oversaw multi-year projct 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   *Sandy Bay, TAS, Australia*
UNIVERSITY OF TASMANIA: DIVISION OF FUTURE STUDENTS (PART-TIME / FULL-TIME)   *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   *Sandy Bay, TAS, Australia*
UNIVERSITY OF TASMANIA: DIVISION OF FUTURE STUDENTS (CASUAL)   *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 tand 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*