



# Todd M. Ellis

DATA ANALYST & STATISTICAL PROGRAMMER

Hobart, Tasmania, Australia

☎ +61 466 683 552 | ✉ toddellis.wa@gmail.com

📍 toddellis | 🌐 tmichaelellis | 🐦 tootstorm | 📞 0000-0002-4410-8676 | 📺 Todd-Ellis-4

## 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

UNIVERSITY OF TASMANIA

- Dissertation: Dynamic mapping and analysis of New South Wales fire regimes: Past, present, and future
- Supervisors: Drs. Grant J. Williamson and David M.J.S. Bowman

Sandy Bay, TAS, Australia

2019 - present

### Master of Science, Geography

WESTERN WASHINGTON UNIVERSITY

- Thesis: Climatic drivers of western spruce budworm outbreaks in the Okanogan Highlands
- Supervisor: Dr. Aquila Flower

Bellingham, WA, USA

2013 - 2016

### Bachelor of Science, Physical Geography / Geology

TEXAS STATE UNIVERSITY

San Marcos, TX, USA

2007 - 2012

## PROFESSIONAL EXPERIENCE

### Data Analyst

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

- Developing statistical models and tools for meeting target university milestones
- Managing design and implementation of broad-scale university ML models for directing future university marketing, funding, and course creation
- Designing and implementing programming and data analytics training seminars for institution staff
- Overseeing development of internal reporting and statistical packages

Sandy Bay, TAS, Australia

2021-02 - present

### Adjunct Researcher

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

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

Sandy Bay, TAS, Australia

2021-09 - present

### Sustainability Analyst

UNIVERSITY OF TASMANIA: DIVISION OF FUTURE STUDENTS (CASUAL)

- 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

Sandy Bay, TAS, Australia

2019-10 - 2021-02

### Data & GIS Analyst

APEX SYSTEMS: APPLE, INC. (CONTRACT)

- 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

Austin, TX, USA

2018-12 - 2019-05

## 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

## Biological Science Technician II

Ridgefield, WA, USA

WASHINGTON DEPARTMENT OF FISH AND WILDLIFE: REGION 5 (CONTRACT)

2017-08 - 2017-11

- Applied QA/QC to develop electronic biological data collection system and relational database
- Analysed biological fisheries data for state government research reporting
- Collected and recorded biological data for government research and both commercial and tribal fisheries
- Designed, built, and maintained department, fisheries, and commercial research equipment

## CONSULTING

2019-06	<b>Post-fire logging effects on reburn severity</b>	USD\$2,500
	U.S. Forest Service	
2018-08	<b>Restoration treatment effects on ponderosa pine growth sensitivity to climate</b>	USD\$2,500
	U.S. Forest Service	

## HONOURS

2021-10	<b>NSW Environment, Energy and Science (DPIE) Eureka Prize for Applied Environmental Research</b>	AUD\$10,000
	Australian Museum	
2021-09	<b>Sustainability Award</b>	
	University of Tasmania	
2021-08	<b>Certifi-Cat of Appreciation</b>	
	Ten Lives Cat Centre	
2020-08	<b>Bushfire Data Quest 2020</b>	AUD\$1,000
	Frontier Development Lab	
2019-09	<b>Tasmania Graduate Research Scholarship (3.5x)</b>	AUD\$28,000 p.a.
	NSW Bushfire Risk Management Research Hub	
2019-09	<b>NSW Bushfire Risk Management Research Hub Top-Up (3.5x)</b>	AUD\$5,000 p.a.
	NSW Bushfire Risk Management Research Hub	
2018-06	<b>Best Fish and Wildlife Science</b>	
	Washington Department of Fish and Wildlife	
2017-10	<b>Conservation Award</b>	
	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

### Geographic Information Systems Technician

Portland, OR, USA

PORTLAND STATE UNIVERSITY

2017-01 - 2017-11

### Assistant Librarian

Kelso, WA, USA

BEACON HILL ELEMENTARY SCHOOL

2017-01 - 2017-11