Seth Temple

Padelford Hall B-222, Seattle, WA 98195

(503)523-6239 • sdtemple@uw.edu • website

EDUCATION

PhD, Statistics, University of Washington — 09/19 - Present

- Research advised by Sharon Browning and Timothy Thornton
- NDSEG Fellow (Class of 2021)
- NIH Predoctoral Trainee in Statistical Genetics
- Alzheimer's Disease Sequencing Project Follow-Up Study

BS, Mathematics, University of Oregon — 09/14 – 06/18

- *Summa cum laude*, Phi Beta Kappa, Departmental Honors, Presidential Scholar
- Honors Thesis: "The Tweedie Index Parameter and Its Estimator"

  Committee: Chris Sinclair (chair), Peter Ralph, Samantha Hopkins

WORK EXPERIENCE

Graduate Research Assistant, University of Washington — 09/20 – Present

Graduate Research Assistant, Los Alamos National Laboratory — 06/20 – 09/20

- Advised by Dr. Kimberly Kaufeld
- Studied spatiotemporal occupancy models for vector epidemiology
- Applied maximum entropy modeling for mosquito species distribution mapping
- Collaborated with environmental scientists, ecologists, and epidemiologists

Actuarial Assistant, Liberty Mutual Insurance — 07/18 – 08/19

- Performed reserving analyses for the leading global surety
- Developed SQL/SAS code to query claims database
- Passed actuarial exams (MAS I, P, and FM)

Research Assistant, University of Oregon — 02/18 – 06/18

- Advised by Stephen Fickas, Professor of Computer Science
- Read Understand Learn Excel (RULE) NSF grant
- Built neural nets in Python to predict punctuation for audio recordings
- Trained *keras* models with graphical processing units

Actuarial Intern, Liberty Mutual Insurance — 06/17 – 09/17

- Created choropleth maps with R to visualize effects of a spatial smoothing algorithm

TEACHING

Teaching Assistant, University of Washington

- CSE/STAT 416 (Sp20): Introduction to Machine Learning
- STAT 423/504 (W20): Applied Regression and Analysis of Variance
- STAT 421 (F19): Applied Statistics and Experimental Design

Teaching Assistant, University of Oregon

- MATH 467 (W18): Stochastic Processes
- MATH 315 (Sp17): Fundamentals of Analysis
- MATH 105 (F16, W18): University Mathematics I

Math Tutor, University of Oregon — 09/14 – 06/17

SKILLS

Software: Python, R, Excel, SQL, Unix, C++, Java, SAS (in order of decreasing proficiency)

Languages: English (native), German (proficient)

SERVICE

UW STAT Directed Reading Program Mentor 09/20 – Present

UW STAT Book Club Organizer 06/20 – 09/20

UW STAT Social Committee Co-chair 06/20 – 06/21

Homework Helper at Seattle Public Library 09/18 – 06/19

Pride@Liberty West Zone 02/19 – 08/19

- Managed volunteer events with local nonprofits for employee resource group

Club Soccer President and Treasurer 06/16 – 06/18

- Managed administration, finances, and social media for traveling team
- Leadership award for most outstanding club sports officer

Tutor at Looking Glass Community Services 04/17 – 06/17

d.a.i. Tübingen Rent an American Volunteer 04/15 – 08/15

COURSEWORK

University of Washington

- Advanced Regression Methods I-II
- Advanced Theory of Statistical Inference I-III
- Statistical Inference I-II
- Stochastic Modelling of Scientific Data I
- Theory of Linear Models
- Measure Theory
- Statistical Genetics I-II: Mendelian Inheritance and Quantitative Traits
- Statistical Genetics Seminar
- Introduction to Computational Biology

University of Oregon

- Regression Analysis
- Stochastic Processes
- Point Set Topology
- Mathematical Cryptography

PAPERS

"Modeling virus occupancy despite imperfect detection: A study of West Nile virus in Ontario" (in progress)

"Species distribution maps of *Culex* mosquitos, important vectors of West Nile virus" (in progress)

"The Tweedie Index Parameter and Its Estimator"

"Bean as Our Future: How Ender's Shadow Disputes the 1997 Backlash against Human Cloning"

- Awarded most outstanding honors paper

CONFERENCES

26th Summer Institute in Statistical Genetics 07/21

25th Summer Institute in Statistical Genetics 07/20

AAAS 2020 Annual Meeting (session aide) 02/20

SAMSI Undergraduate Modeling Workshop 05/18

- Modeled extreme value rainfall events in R
- Leveraged *fields* package to perform spatial smoothing
- Oral presentation of results to workshop audience

University of Oregon Undergraduate Research Symposium 05/18

University of Oregon Undergraduate Research Symposium 05/17

SAMSI Astrophysics Undergraduate Outreach 10/16