Seth Temple

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EDUCATION

PhD, Statistics, University of Washington — Sept '19 - Present

- Research advised by Sharon Browning and Timothy Thornton
- NIH TM32 Predoctoral Trainee in Statistical Genetics
- Alzheimer's Disease Sequencing Project Follow-Up Study

BS, Mathematics, University of Oregon — Sept '14 - June '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 — Sept '20 – Present

Graduate Research Assistant, Los Alamos National Laboratory — July '20 – Sept '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 — July '18 – Aug '19

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

Research Assistant, University of Oregon — Feb – July '18

- Advised by Stephen Fickas, Professor of Computer Science
- Read Understand Learn Excel (RULE) NSF grant 1640492
- Built neural nets in Python to predict punctuation and generate summaries of excerpts
- Trained *keras* models with graphical processing units

Actuarial Intern, Liberty Mutual Insurance — June – Sept '17

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

TEACHING

Teaching Assistant, University of Washington

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

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 — Sept '14 – June '17

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" (undergraduate honors thesis)

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

- Awarded most outstanding honors paper

CONFERENCES

25th Summer Institute in Statistical Genetics (SISG) — July 15 – 29, '20

- Attendance made possible by NSF grant 2016186

AAAS 2020 Annual Meeting (session aide) — Feb 13 – 16, '20

SAMSI Undergraduate Modeling Workshop — May 21 – 25, '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 — May 17, '18

University of Oregon Undergraduate Research Symposium — May 18, '17

SAMSI Astrophysics Undergraduate Outreach — Oct 24 – 26, '16

SERVICE

UW STAT Directed Reading Program Mentor — Sept '20 – Present

UW STAT Book Club Organizer — June '20 – Sept '20

UW STAT Social Committee Co-chair — June '20 – June '21

Homework Helper at Seattle Public Library — Sept '18 – June '19

Pride@Liberty West Zone — Feb – Aug '19

- Managed volunteer events with local nonprofits for employee resource group

Club Soccer President and Treasurer — June '16 – June '18

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

Tutor at Looking Glass Community Services — Apr – June '17

d.a.i. Tübingen Rent an American Volunteer — Apr – Aug '15

SKILLS

Software: Python, R, SQL, Excel, C++, Java, SAS

Languages: English (native), German (proficient)

COURSEWORK

University of Washington

- Advanced Regression Methods (F20-W21)
- Advanced Theory of Statistical Inference I-III (F20-Sp21)
- Statistical Inference I-II (F19, W20)
- Stochastic Modelling of Scientific Data I (F19)
- Statistical Genetics I-II: Mendelian Inheritance and Quantitative Traits (F19, Sp20)
- Introduction to Computational Biology (W20)
- Theory of Linear Models (Sp20)
- Measure Theory (Sp20)
- Statistical Genetics Seminar (F19, W20, Sp20)

University of Oregon

- Regression Analysis (Sp17)
- Stochastic Processes (W17)
- Point Set Topology (F16)
- Mathematical Cryptography (Sp16)