# **Seth Temple**

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#### **EDUCATION**

<ul> <li>PhD, Statistics, University of Washington</li> <li>Research advised by Sharon Browning and Timothy Thornton</li> <li>NIH TM32 Predoctoral Trainee in Statistical Genetics</li> <li>Alzheimer's Disease Sequencing Project Follow-Up Study</li> <li>BS, Mathematics, University of Oregon</li> <li>Summa cum laude, Phi Beta Kappa, Departmental Honors, Presidential Scholar</li> <li>Honors Thesis: "The Tweedie Index Parameter and Its Estimator"</li> </ul>	09/19 - Present 09/14 - 06/18
Committee: Chris Sinclair (chair), Peter Ralph, Samantha Hopkins	
WORK EXPERIENCE	
<ul> <li>Graduate Research Assistant, University of Washington</li> <li>Graduate Research Assistant, Los Alamos National Laboratory</li> <li>Advised by Dr. Kimberly Kaufeld</li> <li>Studied spatiotemporal occupancy models for vector epidemiology</li> <li>Applied maximum entropy modeling for mosquito species distribution mapping</li> <li>Collaborated with environmental scientists, ecologists, and epidemiologists</li> </ul>	09/20 – Present 06/20 – 09/20
<ul> <li>Actuarial Assistant, Liberty Mutual Insurance</li> <li>Performed reserving analyses for the leading global surety</li> <li>Developed SAS/SQL code to query claims databases</li> <li>Reviewed literature of stochastic reserving techniques</li> <li>Passed actuarial exams (MAS I, P, and FM)</li> </ul>	07/18 – 08/19
<ul> <li>Research Assistant, University of Oregon</li> <li>Advised by Stephen Fickas, Professor of Computer Science</li> <li>Read Understand Learn Excel (RULE) NSF grant 1640492</li> <li>Built neural nets in Python to predict punctuation and generate summaries of excerpts</li> <li>Trained keras models with graphical processing units</li> </ul>	02/18 – 06/18
Actuarial Intern, Liberty Mutual Insurance  Created choropleth maps with R to visualize effects of a spatial smoothing algorithm	06/17 – 09/17
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

### **PAPERS**

Awarded most outstanding honors paper

## **CONFERENCES**

25 <sup>th</sup> Summer Institute in Statistical Genetics (SISG)	07/20
<ul> <li>Attendance made possible by NSF grant 2016186</li> </ul>	
AAAS 2020 Annual Meeting (session aide)	
SAMSI Undergraduate Modeling Workshop	05/18
<ul> <li>Modeled extreme value rainfall events in R</li> <li>Leveraged <i>fields</i> package to perform spatial smoothing</li> <li>Oral presentation of results to workshop audience</li> </ul>	
University of Oregon Undergraduate Research Symposium	05/18
University of Oregon Undergraduate Research Symposium	05/17
SAMSI Astrophysics Undergraduate Outreach	10/16
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
<ul> <li>Managed volunteer events with local nonprofits for employee resource group</li> </ul>	
Club Soccer President and Treasurer	06/16 - 06/18
<ul> <li>Managed administration, finances, and social media for traveling team</li> <li>Leadership award for most outstanding club sports officer</li> </ul>	
Tutor at Looking Glass Community Services	04/17 - 06/17
d.a.i. Tübingen Rent an American Volunteer	04/15 - 08/15

<sup>&</sup>quot;Modeling virus occupancy despite imperfect detection: A study of West Nile virus in Ontario" (in progress)

<sup>&</sup>quot;Species distribution maps of *Culex* mosquitos, important vectors of West Nile virus" (in progress)

<sup>&</sup>quot;The Tweedie Index Parameter and Its Estimator" (honors thesis)

<sup>&</sup>quot;Bean as Our Future: How Ender's Shadow Disputes the 1997 Backlash against Human Cloning"

#### **SKILLS**

Software: Python, R, Unix, C++, SQL, Excel, Languages: English (native), German (proficient)

## **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