# Seth D. Temple

# Padelford Hall B-222, Seattle, WA 98195

sdtemple@uw.edu • website • Google Scholar

# **EDUCATION**

PhD, Statistics, University of Washington	09/19 - Present
<ul> <li>Advised by Sharon Browning</li> </ul>	
NDSEG Fellow, NIH Predoctoral Trainee in Statistical Genetics     Albertage Property Property Fellows Line Statistical Genetics	
<ul> <li>Alzheimer's Disease Sequencing Project Follow-Up Study</li> </ul> PS. Mathematica, University of Oracon	00/14 06/19
BS, Mathematics, University of Oregon <ul><li>Summa cum laude, Phi Beta Kappa, Departmental Honors, Presidential Scholar</li></ul>	09/14 – 06/18
RESEARCH & WORK	
Graduate Research Assistant, University of Washington	09/20 – Present
<ul> <li>Developing methods to study recent evolution in human populations</li> <li>Studying patterns of identity-by-descent in families affected by Alzheimer's</li> </ul>	
Graduate Research Assistant, Los Alamos National Laboratory	06/20 - 09/20
<ul> <li>Advised by Dr. Kimberly Kaufeld</li> </ul>	
<ul> <li>Constructed spatiotemporal occupancy models for vector epidemiology</li> <li>Applied maximum entropy modeling for magguite applied distribution mapping</li> </ul>	
<ul> <li>Applied maximum entropy modeling for mosquito species distribution mapping</li> <li>Actuarial Assistant, Liberty Mutual Insurance</li> </ul>	07/18 - 08/19
<ul> <li>Performed reserving analyses for the leading global surety</li> </ul>	07/10 00/17
<ul> <li>Developed SQL/SAS code to query claims database</li> </ul>	
<ul><li>Passed actuarial exams (MAS I, P, and FM)</li></ul>	
Research Assistant, University of Oregon	02/18 - 06/18
<ul> <li>Built neural nets in Python to predict punctuation for audio recordings</li> <li>Trained <i>keras</i> models with graphical processing units</li> </ul>	
Actuarial Intern, Liberty Mutual Insurance	06/17 - 09/17
• Created choropleth maps with R to visualize effects of a spatial smoothing algorithm	
TEACHING	
Instructor of Record, University of Washington	
<ul> <li>BIOST 550 (Sp22): Statistical Genetics I: Mendelian Traits</li> </ul>	
Directed Reading Program, University of Washington	09/20 - Present
<ul> <li>Mentor to 4 students, member of organizing and admissions committees</li> </ul>	
Teaching Assistant, University of Washington	
<ul> <li>Module 15 of SISG (Su22): Association Mapping: GWAS and Sequencing Data</li> </ul>	
<ul> <li>CSE/STAT 416 (Sp20): Introduction to Machine Learning</li> <li>STAT 422/504 (W20): Applied Responsion and Applying of Various</li> </ul>	
<ul> <li>STAT 423/504 (W20): Applied Regression and Analysis of Variance</li> <li>STAT 421 (F19): Applied Statistics and Experimental Design</li> </ul>	
Teaching Assistant, University of Oregon	
<ul> <li>MATH 467 (W18): Stochastic Processes</li> </ul>	
<ul> <li>MATH 407 (W10). Stochastic Flocesses</li> <li>MATH 315 (Sp17): Fundamentals of Analysis</li> </ul>	
- MATH 105 (E16, W19), Heisensitz Mathematica I	

MATH 105 (F16, W18): University Mathematics I

#### **PAPERS**

- Temple, S.D., Manore, C.A. & Kaufeld, K.A. Bayesian time-varying occupancy model for West Nile virus in Ontario, Canada. *Stoch Environ Res Risk Assess* (2022). https://doi.org/10.1007/s00477-022-02257-4
- Gorris, M.E., Bartlow, A.W., Temple, S.D. et al. Updated distribution maps of predominant Culex mosquitoes across the Americas. *Parasites & Vectors* 14, 547 (2021). <a href="https://doi.org/10.1186/s13071-021-05051-3">https://doi.org/10.1186/s13071-021-05051-3</a>
- Temple, S.D. PhD Preliminary Exam Report on "Pair-based likelihood approximations for stochastic epidemic models". (2021). <a href="https://github.com/sdtemple/pblas">https://github.com/sdtemple/pblas</a>
- Temple, S.D. Text search informed by word frequencies and topic modeling: A human-machine collaborative approach to analyzing English text data from multilingual, multicultural students. (2021). <a href="https://github.com/sdtemple/coilnlp">https://github.com/sdtemple/coilnlp</a>
- Temple, S.D. The Tweedie Index Parameter and Its Estimator. (2018). <a href="https://math.uoregon.edu/wp-content/uploads/2018/07/TempleStempleTweedieThesis.pdf">https://math.uoregon.edu/wp-content/uploads/2018/07/TempleStempleTweedieThesis.pdf</a>
- Temple, S.D. Bean as Our Future: How *Ender's Shadow* Disputes the 1997 Backlash against Human Cloning. (2017). <a href="https://scholarsbank.uoregon.edu/xmlui/handle/1794/23493">https://scholarsbank.uoregon.edu/xmlui/handle/1794/23493</a>

#### **CONFERENCES**

International Genetic Epidemiology Society Annual Meeting (presenter)	09/22
International Society Bayesian Analysis (abstract accepted)	06/22
2021 Joint Statistical Meetings	08/21
25 <sup>th</sup> , 26 <sup>th</sup> Summer Institute in Statistical Genetics	07/20, 07/21
AAAS 2020 Annual Meeting	02/20
SAMSI Undergraduate Modeling Workshop	05/18
University of Oregon Undergraduate Research Symposium (presenter)	05/18
University of Oregon Undergraduate Research Symposium (presenter)	05/17
SAMSI Astrophysics Undergraduate Outreach	10/16
SERVICE	
UW STAT Social Committee Co-chair	06/20 - 06/22
UW STAT Social Committee Co-chair UW STAT Book Club Organizer	06/20 – 06/22 Summer '20, '21
UW STAT Book Club Organizer	Summer '20, '21
UW STAT Book Club Organizer Homework Helper at Seattle Public Library	Summer '20, '21 09/18 – 06/19
UW STAT Book Club Organizer  Homework Helper at Seattle Public Library  Pride@Liberty West Zone	Summer '20, '21 09/18 - 06/19 02/19 - 08/19
UW STAT Book Club Organizer  Homework Helper at Seattle Public Library  Pride@Liberty West Zone  Club Soccer President and Treasurer	Summer '20, '21 09/18 - 06/19 02/19 - 08/19
<ul> <li>UW STAT Book Club Organizer</li> <li>Homework Helper at Seattle Public Library</li> <li>Pride@Liberty West Zone</li> <li>Club Soccer President and Treasurer</li> <li>Managed administration, finances, and social media for traveling team</li> </ul>	Summer '20, '21 09/18 - 06/19 02/19 - 08/19
<ul> <li>UW STAT Book Club Organizer</li> <li>Homework Helper at Seattle Public Library</li> <li>Pride@Liberty West Zone</li> <li>Club Soccer President and Treasurer</li> <li>Managed administration, finances, and social media for traveling team</li> <li>Leadership award for most outstanding club sports officer</li> </ul>	Summer '20, '21 09/18 – 06/19 02/19 – 08/19 06/16 – 06/18

#### **SKILLS**

Software: Python, R, Excel, Unix, SQL, qsub (experienced); C++, Java, SAS, slurm (intermediate)

Languages: English (first), 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-II
- Theory of Linear Models
- Measure Theory
- Statistical Genetics I-II: Mendelian Inheritance and Quantitative Traits
- Statistical Genetics Seminar
- Introduction to Computational Biology
- Molecular Population Genetics and Evolution
- Statistical Consulting

### University of Oregon

- Mathematical Statistics I-II
- Regression Analysis
- Stochastic Processes
- Point Set Topology
- Mathematical Cryptography
- Real Analysis
- Linear Algebra I-II
- Multivariable Calculus
- Differential Equations
- Introduction to Computer Science I-III
- Algorithms and Data Structures
- Data Science