

EDUCATION

Colorado State University , Fort Collins, CO <i>Doctor of Philosophy.</i> , Statistics Thesis: <i>Bayesian Tree Based Methods for Longitudinally Assessed Environmental Mixtures</i> Advisor: Dr. Ander Wilson	2019 – 2024
Colorado State University , Fort Collins, CO <i>Master of Science</i> , Statistics	2019 – 2023
St. Lawrence University , Canton, NY <i>Bachelor of Science</i> , Mathematics & Statistics, <i>Magna Cum Laude</i>	2015 – 2019

EXPERIENCE

Graduate Research Assistant <i>Department of Statistics</i> , Colorado State University	Spring 2021 – Summer 2024
Coding & Cookies Workshop Instructor <i>Department of Statistics</i> , Colorado State University Python: Working with data Tidy Data in R: Tidyverse R Basics	Fall 2019 – Spring 2024 Fall 2023, Spring 2024 Fall 2021, Fall 2022, Spring 2023 Spring 2022
Statistics Private Tutor <i>Department of Statistics</i> , Colorado State University STAR 511 - Design and Data Analysis for Researchers I: R Software	Spring 2024 Spring 2024
Student Organized Activities and Research Seminars (SOARS) Coordinator <i>Department of Statistics</i> , Colorado State University	Spring 2023
Lead Teaching Assistant <i>Department of Statistics</i> , Colorado State University	Fall 2022, Fall 2023
Graduate Teaching Assistant <i>Department of Statistics</i> , Colorado State University STAT 301: Introduction to Statistical Methods STAT 201: General Statistics	Fall 2019 – Spring 2021 Spring 2020 – Spring 2021 Fall 2019
IT Department Student Employee <i>Information Technology</i> , St. Lawrence University	Fall 2016 – Spring 2019
Student Mentor <i>Peterson Quantitative Reasoning Center</i> , St. Lawrence University	Fall 2017 – Spring 2019

PUBLICATIONS

Published:

Weller, Z. D., Im, S., Palacios, V., Stuchiner, E., & von Fischer, J. C. (2022). Environmental Injustices of Leaks from Urban Natural Gas Distribution Systems: Patterns among and within 13 US Metro Areas. *Environmental Science & Technology*.
🌟 Selected for American Chemical Society (ACS) Editors' Choice

Mork D, **Im S**, Wilson A (2024). dlmtree: Bayesian Treed Distributed Lag Models. R package version 1.0.0, <https://danielmork.github.io/dlmtree/>, <https://github.com/danielmork/dlmtree>.

Under Review / To be submitted:

- Im, S.**, Mork, D., Leung, M., Weisskopf, M., Kioumourtoglou, M-A., & Wilson, A. (2024). Treed Distributed Lag Mixture Model With Zero-Inflated Count Data to Investigate the Association Between Air Pollution and Pregnancy Loss. *Submitted to Annals of Applied Statistics*.
- Im, S.**, Mork, D., & Wilson, A. (2024). Heterogeneous Distributed Lag Mixture Model for Precision Environmental Health with Longitudinally Assessed Mixture Exposures. *Submitted to Journal of the Royal Statistical Society Series C: Applied Statistics*.
- Im, S.**, Wilson, A., & Mork, D. (2024). Structured Bayesian Regression Tree Models for Estimating Distributed Lag Effects: The R Package dlmtree. *To be submitted to R Journal*.

HONORS & AWARDS

Pi Mu Epsilon (Mathematics Honor Society) President, St. Lawrence University	2019
Statistics Dr. O. Kenneth Bates Award, St. Lawrence University	Spring 2019
Dean's list, St. Lawrence University	Fall 2016 – Spring 2019

CONFERENCE & PRESENTATION

Contributed:

Poster presentation, “ <i>Treed distributed lag mixture model with zero-inflated count data to investigate the association between air pollution and pregnancy loss</i> ”, The Graduate Student Showcase, Colorado State University, Fort Collins, CO	November 2023
Poster presentation, “ <i>Treed distributed lag mixture model with zero-inflated count data to investigate the association between air pollution and pregnancy loss</i> ”, The EnviBayes Workshop, International Society for Bayesian Analysis (ISBA), Colorado State University, Fort Collins, CO	September 2023
Oral presentation, “ <i>Treed distributed lag mixture model with zero-inflated count data to investigate the association between air pollution and pregnancy loss</i> ”, Joint Statistical Meetings (JSM), American Statistical Association (ASA), Toronto, ON, Canada	August 2023
Poster presentation, “ <i>Treed distributed lag mixture model with zero-inflated count data to investigate the association between air pollution and pregnancy loss</i> ”, The Graduate Student Showcase, Colorado State University, Fort Collins, CO	November 2022
Oral presentation (virtual), “ <i>Environmental justice of natural gas leaks</i> ”, Colorado / Wyoming Chapter, American Statistical Association (ASA)	October 2021
Oral presentation (virtual), “ <i>Environmental justice of natural gas leaks</i> ”, Joint Statistical Meetings (JSM). American Statistical Association (ASA)	August 2021
Oral presentation (virtual), “ <i>Environmental justice of natural gas leaks</i> ”, Front Range Student Ecology Symposium (FRSES), Colorado State University, Fort Collins, CO.	March 2021
Oral presentation and poster, “ <i>Are there racist soccer referees?</i> ”, Festival of Science, St. Lawrence University, Canton, NY.	April 2019
Oral presentation, “ <i>Are there racist soccer referees?</i> ”, Mathematical Association of America (MAA) Seaway conference, St. John Fisher College, Rochester, NY.	April 2019

SKILLS

R: Basic R, Tidyverse, Rcpp, RStan, R package development
Python: NumPy, Pandas, Matplotlib
Structured Query Language (SQL): Proficient
Git: Git, GitHub
High performance computing (HPC): Proficient
Language: English – Bilingual Proficiency, Korean – Native

Last updated: August 1, 2024