

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

Research Specialist <i>Naval Future Innovation Research Group</i> , Republic of Korea Naval Headquarters	Summer 2024 – Present
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. Comprehensive R Archive Network (CRAN) package, version 1.0.0.

Im, S., Wilson, A., & Mork, D. (2025). Structured Bayesian Regression Tree Models for Estimating Distributed Lag Effects: The R Package dlmtree. *R Journal*.

Under Review / To be submitted:

Im, S., Mork, D., Leung, M., Weisskopf, M., Kioumourtoglou, M-A., & Wilson, A. (2025). Treed Distributed Lag Mixture Model With Zero-Inflated Count Data to Investigate the Association Between Air Pollution and Pregnancy Loss. *Submitted to Statistics in Medicine*.

Im, S., Mork, D., & Wilson, A. (2025). 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*.

HONORS & AWARDS

Excellence Award – ROK Army Big Data Analytics Competition	Fall 2025
Excellence Award – ROK Navy & Marine Corps Artificial Intelligence Innovation Challenge	Spring 2025
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

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

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: December 1st, 2025