

Sara Kathryn Colando

🌐 scolando.github.io
✉ scolando@andrew.cmu.edu
🐙 GitHub

EDUCATION

Ph.D. in Statistics, Carnegie Mellon University, Pittsburgh, PA 2024 - 2029 (*expected*)

B.A. in Mathematics and Philosophy, Pomona College, Claremont, CA 2020-2024

Magna cum laude (GPA: 3.99/4.00) and departmental honors

- Math thesis supervised by Jo Hardin, titled "Selecting ChIP-Seq Normalization Methods from the Perspective of their Technical Conditions."
- Philosophy literature review supervised by Julie Tannenbaum, titled "What are the Key Philosophical Conceptions of Fairness and Justice?" with an emphasis on conceptions relevant to algorithmic fairness.

PUBLICATIONS AND PAPERS

• Peer-reviewed articles

2. Colando, S., Schulz, D., Hardin, J. **Selecting ChIP-Seq Normalization Methods from the Perspective of their Technical Conditions**, *Briefings in Bioinformatics*, 26(4), 2025.

<https://doi.org/10.1093/bib/bbaf431>

1. Colando, S. & Hardin, J. **Philosophy within Data Science Ethics Courses**, *Journal of Statistics & Data Science Education*, 32(4), 2024. <https://doi.org/10.1080/26939169.2024.2394542>

• In progress

2. Colando, S., Franke, E., Reinhart, A. **Analyzing Statistics Students' Writing Before and After the Emergence of Large Language Models**. In progress.

1. Colando, S., Niezink, N.M.D., Jaspers, E. **Why Do Students Avoid Each Other? Investigating Positive and Negative Network Effects**. In progress.

TEACHING EXPERIENCE

Carnegie Mellon Department of Statistics & Data Science

Graduate Teaching Assistant

36-402: Undergraduate Advanced Data Analysis Spring 2026

36-707: Regression Analysis, *guest lectured on penalized regression* Fall 2025

Carnegie Mellon Sports Analytics Camp, *co-taught four lectures* Summer 2025

36-226: Introduction to Statistical Inference, *Head TA* Spring 2025

36-600: Overview of Statistical Learning and Models Fall 2024

Pomona College

Course Mentor and Grader

MATH158: Statistical Linear Models	Spring 2024
MATH058B: Introduction to Biostatistics	Spring 2023
ID001: First-Year Interdisciplinary Seminar: I Disagree	Fall 2023
BIOL040: Introductory Genetics with Lab	Fall 2022
MATH060: Linear Algebra	Fall 2021
1-2-1 Summer Bridge Program	Summer 2021

PRESENTATIONS

Colando, S. "Why Do Students Avoid Each Other? Investigating Positive and Negative Network Effects." ADA Presentation. Carnegie Mellon University.	Nov. 2025
Colando, S. "Why Do Students Avoid Each Other? Investigating Positive and Negative Network Effects." Workshop. Carnegie Mellon University.	Nov. 2025
Colando, S. "Why Do Students Avoid Each Other? Investigating Positive and Negative Network Effects." ICSD Works-in-Progress Seminar. Carnegie Mellon University.	Nov. 2025
Colando, S. "Predicting Avoidance Ties within Social Networks." Workshop. Carnegie Mellon University.	Mar. 2025
Franke, E. & Colando, S. "Computational Efficiency of R's data.table Package." StatBytes. Carnegie Mellon University.	Mar. 2025
Colando, S. & Hardin, J. "Philosophy Within Data Science Ethics Courses." CAUSE Webinar Series.	Oct. 2024
Colando, S., Pipping, J., Wilson, K. "Clustering Race Horse Movement Profiles to Discover Trends in Injured Horses." Carnegie Mellon Sports Analytics Conference.	Nov. 2023
Colando, S., Pipping, J., Wilson, K. "Clustering Race Horse Movement Profiles to Discover Trends in Injured Horses." Summer Undergraduate Research Experience Showcase. Carnegie Mellon University.	Jul. 2023
Colando, S. "Pomona Funded Summer Experiences Informational Session." Panelist. Pomona College Family Weekend.	Oct. 2022
Chu, C., Colando, S., Nandi, D., Serrano, X. "Quantifying Uncertainty in a Tumor Segmentation Model." A Symposium on Big Data, Human Health, and Statistics. University of Michigan School of Public Health.	Jul. 2022

POSTERS

Colando, S. & Franke E. "Analyzing Statistics Students' Writing Before and After the Emergence of Large Language Models." Research Satellite. United States Conference on Teaching Statistics.	Jul. 2025
Franke, E. & Colando, S. "Teaching Data Cleaning and Wrangling with R's <code>data.table</code> Package." Posters and Beyond. United States Conference on Teaching Statistics.	Jul. 2025
Colando, S. "Analyzing Data Science Ethics Pedagogies." Claremont Center for Mathematical Sciences.	Sep. 2023
Colando, S. "Analyzing Data Science Ethics Pedagogies." Intensive Summer Experience Symposium. Pomona College.	Sep. 2023
Colando, S. "Analyzing ChIP-Seq Normalization Techniques through the Lens of their Biological Assumptions." Intensive Summer Experience Symposium. Pomona College.	Sep. 2022

GRANTS

Carnegie Mellon University Institute of Complex Social Dynamics	2025-2027
Title: "Graduate Student Fellowship"	
Role: Recipient	\$6,000/year
Carnegie Mellon University Department of Statistics & Data Science	2025
Title: "StatBytes Travel Grant"	
Role: Co-recipient	\$500
National Science Foundation (Award Abstract: #2303612)	2025
Title: <code>data.table</code> Ambassador Travel Grant	
Role: Co-recipient	\$2,700
Pomona College Department of Mathematics and Statistics	2024
Title: "Kenneth Cooke Summer Research Fellowship"	
Role: Recipient	\$4,200
Pomona College	2022, 2023
Title: "Summer Undergraduate Research Program (SURP)"	
Role: Recipient	\$4,200

LEADERSHIP AND SERVICE

Professional Service

<i>Journal of Statistics and Data Science Education</i> Referee	2025-present
CMSA Conference Reproducible Research Competition Judge	2025
Undergraduate Statistics Project Competition (USPROC) Judge	2025
ASA K-12 Data Visualization Poster Competition Judge	2025

Carnegie Mellon University Department of Statistics & Data Science

Co-head of Ph.D. Mentorship Committee	2025-present
Co-founder of TidyTuesday Club for Undergraduate Students	2025-present
Mentor for Undergraduate Statistics Students	2025-present

Pomona College Department of Philosophy

Student Representative on Tenure-track Faculty Hiring Committee	2023-2024
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Pomona-Pitzer Athletics

Varsity Women's Cross Country Team Captain	2023
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WORKSHOPS AND REU PROGRAMS

Intelligence, Data, Ethics, And Society Summer Program, University of California, San Diego	Summer 2023
Carnegie Mellon Sports Analytics Camp	Summer 2023
Big Data Summer Institute, University of Michigan	Summer 2022

HONORS AND AWARDS

Passed First-year Ph.D. Data Analysis Exam with Distinction	2025
Blair Nixon Award	2024
Bruce Jay Levi Senior Prize	2024
W.T. Jones Prize in Philosophy	2024
Phi Beta Kappa	2024
Sigma Xi	2024
Pomona College Scholar	2020-2024
Women's Cross Country and Track and Field Varsity Letter Recipient	2020-2024