

LAUREN CAPPIELLO

Assistant Professor, Department of Mathematics and Statistics
California State University Sacramento

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EDUCATION

Ph.D., Applied Statistics
B.S., Statistics, *summa cum laude*

University of California, Riverside
University of California, Riverside

TEACHING

California State University, Sacramento

Assistant Professor

Aug 2020 - ongoing

- Stat 115A Introduction to Probability Theory
- Stat 115B Introduction to Mathematical Statistics
- Stat 1 Introduction to Statistics
- Math 26A Calculus I for the Social and Life Sciences

University of California, Riverside

Instructor of Record

Sep 2017 - Dec 2019

- Stat 100A Introduction to Statistics I
- Stat 100B Introduction to Statistics II

RESEARCH PAPERS AND PRESENTATIONS

Cappiello, L., Flores, A., *Challenges and successes of emergency online teaching*. In revision.

Cappiello, L., Zhang, Z., Shen, C., Butala, N.M., Cui, X. and Yeh, R.W. (2021), *Adjusting for population differences using machine learning methods*. J R Stat Soc Series C. doi.org/10.1111/rssc.12486

Cappiello, L. (2020). *Applied machine learning methods in adjusting for population differences*. Orange County Biostatistics Symposium. Remote due to COVID-19.

Cappiello L. (2020). *Adjusting for population differences using applied machine learning methods*. Doctoral dissertation, UC Riverside.

Cappiello L. (2016). *A novel estimation technique for a five-parameter bivariate beta distribution*. Honors capstone project, UC Riverside.

Cappiello L. (2016). *A novel estimation technique for a five-parameter bivariate beta distribution*. International Biometric Society Eastern North American Region Meeting. Austin, Texas.

MENTORING

Undergraduate Research Projects

Nnaemeka Onyeokoro, CSUS Electrical & Electronic Engineering major

Spring 2022 – ongoing

- Working project title: *Sensitivity analyses of methods in adjusting for population differences*.

Consulting for Student Research

Feini Pek, CSUS Mathematics Major

Fall 2021 – ongoing

- Feini is doing statistical analyses for an ongoing research project conducted in the CSUS Biology Department. We have worked on R for statistical analyses and data visualization as well as the use of non and semi-parametric tests.

Sam Haynes, CSUS Economics Masters Student

Fall 2021

- Met to discuss possible approaches to running beta regressions for longitudinal data in R.

Connor Drab, Sacramento State Mathematics Major

Fall 2021

- Met to discuss possible approaches to a statistical analysis of time series data he was doing for his work.

Athena by Women in STEM

Shriya Iyer, Camp Talaria Participant

Summer 2020

- Camp Talaria is a remote mentored research program for underrepresented, female-identified high school students.
- Shriya used Python to scrape Twitter data for a sentiment analysis on the use of face masks for COVID-19 prevention.

ACADEMIC CONSULTING

California State University, Sacramento

Erin Green, CSUS Assistant Professor of Physical Therapy

Summer 2021

- Complete data cleaning, analysis, and write up for an American Council of Academic Physical Therapy survey.

Sue Hobbs, CSUS Assistant Professor of Child and Adolescent Development

Spring 2021

- Brief consultation on the use of propensity score matched data in structural equation modeling.

University of California, Riverside

Lead Consultant, Graduate Quantitative Methods Center

Jul 2018 - Jun 2019

- Provided statistical and computational consultations to graduate students and postdoctoral researchers from across campus.
- Supervised and managed a team of part time consultants.
- Developed and taught workshops, seminars, and instructional labs: *Introduction to Statistical Inference*; *Introduction to ANOVA*; *Introduction to Programming*; *Introduction to Multilevel Modeling*; *Introduction to SAS*; *Introduction to R*; *Intermediate Topics in R*; *Overview of Causal Inference*; *Improving Research Credibility* *Writing Articles in LaTeX*; *The UCR LaTeX Dissertation Template*; and *Experimental Design*

GRANTS

California State University, Sacramento

- Applied for *Pedagogy Enhancement Award* with Jasdeep Pannu to redesign Stat 103, Intermediate Statistics.
- *Curriculum Redesign Grant: Achieving Equitable Outcomes in Undergraduate Programs* Fall 2021
Proposed (with Sayonita Ghosh Hajra, Jasdeep Pannu, and Topaz Wiscons) to redesign Math 10, Essentials of Algebra. This proposal was funded for the full \$39654.12 requested.
- *Summer 2021 Online Course Design Grant Program* Spring 2021
Redesigned Stat 1, Introduction to Statistics, to be a six-week, fully online course. This course was offered in Summer 2021.

OTHER PRESENTATIONS AND WORKSHOPS

Panelist, *Alumni Speakers*

Jan 10, 2022

CSUS Summer Grant Program

Remote

Discussion leader (with Dr. Analisa Flores, UC Riverside)

Challenges and Successes of Emergency Online Teaching: Where Do We Go From Here?

Aug 2, 2021

Birds of a Feather Discussion at the Joint Statistical Meeting

Remote

Panelist, *Faculty Panel*

May 13, 2021

UC Riverside Career Mentoring of Underrepresented STEM Students for the Professoriate

Remote

Panelist, *Getting Hired: CSUs and Community Colleges*

May 6, 2021

UC Riverside Teaching Careers Week

Remote

Panelist, *Meeting With Alumni*

Jan 15, 2021

National Institute of Statistical Sciences Graduate Student Network

Remote

PROFESSIONAL DEVELOPMENT

UNCF Institute for Capacity Building - Excelencia - Coleridge Initiative

- CSUS Team Member (Beta Cohort), *Leveraging Big Data to Achieve Equity* Jan 2022 - Apr 2022

Mathematical Association of America

- Fellow, *Project NeXT (New Experiences in Teaching)* Aug 2021 - Aug 2022

California State University, Sacramento

- *CSU Certificate Program in Student Success Analytics* Spring 2022
- *Flexible Fundamentals Workshop*. Faculty Learning Community Summer 2021
- *Designing for Student Success: Building Inclusive Practices by Interrogating Power and Privilege*. Professional Learning Community 2020 - 2021
- *Teach ON!-Line Summer Camp* Aug 2020

SERVICE

The Consortium for the Advancement of Undergraduate Statistics Education with the American Statistical Association

- Judge, Undergraduate Research Project category, *Undergraduate Statistics Project Competition* Jan 2022

Mathematical Association of America

- Co-Coordinator - Gold '21 Cohort, *Project NeXT* Aug 2021 - Aug 2022

Reviewer

- Journal of Statistical Theory and Practice

Editorial Board

- Cummings J. *Proofs, A Long-Form Mathematics Textbook*. 2021

California State University

- Northern California Data Science Alliance 2021 - ongoing

CSUS Department of Mathematics and Statistics

- Search Committee 2021 - 2022
- Core Curriculum Committee 2021 - 2022
- Social Committee 2021 - 2022
- Curriculum Committee 2020 - 2021
 - Lower division computing course working group
- Calculus Committee 2020 - 2021

University of California, Riverside

- President and Cofounder, Statistics Graduate Student Association 2019 - 2020
- Graduate Student Ambassador, Statistics Department 2019 - 2020
- President, Mu Sigma Rho 2018 - 2020
- Secretary, Mu Sigma Rho 2017 - 2018

OUTREACH

- Request a Woman Scientist Resource for 500 Women Scientists 2018 - ongoing
- Science Network Program Mentee with Union of Concerned Scientists 2019

PROFESSIONAL ORGANIZATIONS

Member, Mathematical Association of America	2021 - ongoing
Member, American Statistical Association	2019 - ongoing
· Section on Statistics and Data Science Education	
· Section on Nonparametric Statistics	
· Biopharmaceutical Section	
· Sacramento Statistical Association	
· Justice, Equity, Diversity, and Inclusion Outreach Group	

ONLINE PUBLICATIONS

Untitled. (Accepted 2019) Union of Concerned Scientists blog.

Learning to Love Statistics. (2018) University of California, Riverside Graduate Student Resource Center blog. Republished on my website lgpcappiello.github.io/lovestatistics/.

MEDIA

Interviewed for *Excited to go back: Sac State students weigh in on fall 2021 teaching modalities.* (2021) The State Hornet. statehornet.com/2021/04/sac-state-students-fall-2021-in-person-opinions/