DAVIS SAMUEL COOPER BERLIND

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Last Updated: July 22, 2025

EDUCATION

2021 - 2026	University of California, Los Angeles PhD, Statistics CPhil, Statistics (2024) Advisor: Oscar Hernan Madrid Padilla
2018 - 2020	Duke University MS, Economics and Computation
2012 - 2016	University of Pennsylvania BA, Philosophy, Politics, Economics – Cum Laude

HONORS AND AWARDS

2025	NSF/CEME SBIES 2025 Travel Award
2018	Duke Economics Masters Scholar Award
2016	Delta Phi Alpha, National German Honor Society
2012 - 2016	Benjamin Franklin Scholar
2015 - 2016	Dean's List
2014 - 2015	Dean's List
2015	Wharton Public Policy Initiative Summer Funding Award

PUBLICATIONS

Preprints

1. Berlind, D., Cappello, L. and Madrid Padilla, O.H., (2025). "A Bayesian framework for change-point detection with uncertainty quantification." *arXiv preprint arXiv:2507.01558*.

PRESENTATIONS

Contributed Presentations

1. A Bayesian framework for change-point detection with uncertainty quantification.

- (a) 8th International Conference on Econometrics and Statistics (EcoSta 2025). Tokyo, Japan (August 2025).
- (b) 14th International Conference on Bayesian Nonparametrics (BNP 14) (Poster). Los Angeles, CA (June 2025).
- (c) 2025 NSF/CEME SBIES Conference. Philadelphia, PA (May 2025).

TEACHING EXPERIENCE

Teaching Fellow, University of California, Los Angeles:

- STATS 10: Introduction to Statistical Reasoning (F22, W23, S23, S24)
- STATS 13: Introduction to Statistical Methods for Life and Health Sciences (SU23, F23, W24)
- STATS 20: Introduction to Statistical Programming with R (F24)
- STATS 100A: Introduction to Probability (SU22)
- STATS 100B: Introduction to Mathematical Statistics (W25, S25)
- STATS 101B: Introduction to Design and Analysis of Experiment (S22, SU23)
- STATS 101C: Introduction to Statistical Models and Data Mining (SU24)

EDITORIAL SERVICE

Reviewer: Stat (2)

SOFTWARE AND PROGRAMMING

 $\operatorname{\mathbf{mich}}$ – An R package implementing the Multiple Independent Change-Point (MICH) method introduced in Berlind, Cappello, Madrid Padilla (2025). The main function in the package $\operatorname{\mathtt{mich}}$ () takes a length T sequence $\mathbf{y}_{1:T}$ with potentially many change-points in the mean and variance, and deploys a backfitting procedure to find a variational approximation to the posterior distribution of the change-points.

Programming Languages: R, Python, C++, Java, MATLAB

Typesetting: LATEX, Markdown

Other: Git, Bash

Cluster Computing: UGE and Slurm Workload Managers

PROFESSIONAL EXPERIENCE

Duke University, Durham, NC

Research Assistant (Christopher Timmins, Rebecca Steorts)

Jan. 2019 - July 2020

NYC Mayor's Office of Management and Budget , New York, NY Analyst	July 2017 - Aug. 2018
Cleary Gottlieb Steen & Hamilton LLP, New York, NY Paralegal	Aug. 2016 - July 2017
University of Pennsylvania, Philadelphia, PA Research Assistant (Eugen Dimant, Camilo Garcia Jimeno)	Sept 2015 - Aug. 2026
The Brookings Institution , Washington, DC Research Intern	May 2015 - Aug. 2015
Office of Housing and Community Development, Philadelphia, PA Compliance Intern	June 2014 - Aug. 2014