

Krisztina Dearborn

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EDUCATION

University of Colorado Boulder

Boulder, CO

Ph.D., Mathematics

Expected 2020

M.S., Applied Mathematics

2015 - 2018

Central Connecticut State University

New Britain, CT

Post-Baccalaureate Studies, Mathematics

2014 - 2015

B.S., Mathematics and Physics

2010 - 2014

EXPERIENCE

University of Colorado Boulder

Statistical Collaborator

2018-Present

Laboratory for Interdisciplinary Statistical Analysis

- Interact with clients ranging from university researchers in a variety of disciplines to local businesses.
- Work as a part of a collaborative group to understand the policy or research question of the client and how statistical analysis can provide them with data driven solutions or results.

Researcher

Unbiased Estimation

2017-Present

- Apply mathematical statistics to optimize estimation for Markov models with applications in economics, financial markets, and infrastructure deterioration.
- Use Mathematica to simulate and compare estimates in a Markov model.

Identifiable Elicitation Complexity

2017

- Used analysis to prove a result in mathematical statistics with applications in economics.
- *On the indirect elicibility of the mode and modal interval*; Accepted for publication in the Annals of the Institute of Statistical Mathematics

Behavior of Random Polynomials

2016

- Proved result on how behavior of random polynomials will evolve as the factors grow.
- Use Sage to simulate behavior of roots and critical values of random polynomials.

Instructor

2015 - Present

- Courses: Statistics, Calculus with Systems and Modeling, Single-variable Calculus, and Algebra
- Focused on creating collaborative class environment using group work to encourage students to engage with problems in a productive exchange of ideas.

SKILLS

Programming and Software

R, Microsoft Excel, Mathematica, Sage, HTML

Modeling and Analysis

- Statistical methods including statistical tests, general linear models, classification, ridge regression, and LASSO.
- Time series analysis including forecasting with ARMA and ARIMA models as well as signal processing and filtration.
- Stochastic processes including Markov chains and Geometric Brownian motion.

LEADERSHIP

University of Colorado Boulder

Lead Teaching Assistant, Graduate Teacher Program

2018-Present

Vice President, Association for Women in Mathematics - Boulder Chapter

2017-Present

Central Connecticut State University

Team Captain, Women's Cross Country and Track and Field Teams

2013-2015

President, Physics Club

2012-2014

ACHIEVEMENTS

University of Colorado Boulder

W. J. Thron Mathematics Fellowship

2018

Central Connecticut State University

President's Citation Award for Outstanding Community Engagement

2014

Coca-Cola Award for Highest Female Student-Athlete GPA

2014

John B. Bulman Distinguished Service Award

2013

Computer Science, Mathematics, and Physics Scholarship

2010-2014