Dr. Kevin A. McAlister

CONTACT INFORMATION	36 Eagle Row 579 Psychology and Interdisciplinary Sciences Atlanta, Georgia 30322

kevin.mcalister@emory.edu
www.kevinmcalister.org

RESEARCH INTERESTS

Bayesian Statistics, Bayesian Nonparametric Methods, Machine Learning, Statistical Computing, Social Choice Theory, Electoral Systems and Representation, Legislative Studies

CURRENT ACADEMIC APPOINTMENT

Emory University, Atlanta, GA

Teaching Assistant Professor, Department of Quantitative Theory and Methods.

PREVIOUS ACADEMIC APPOINTMENTS

Emory University, Atlanta, GA

Visiting Assistant Professor, Department of Quantitative Theory and Methods. (2020 - 2022)

EDUCATION

University of Michigan, Ann Arbor, MI

Ph.D., Political Science, August 2020
- Dissertation Title: *Essays on Latent Variable Models and Roll Call Scaling*
- Committee: Walter Mebane (Co-Chair), Kevin Quinn (Co-Chair), Christopher Fariss, Scott Page
- Winner of 2018 John T. Williams Award from the Society of Political Methodology for best dissertation proposal in the area of political methodology.

M.A., Statistics, August 2020

Washington University in St. Louis, St. Louis, MO

M.A., Political Science, August 2013
- Advisors: Norman Schofield, Jacob Montgomery

University of North Carolina, Chapel Hill, NC

B.A., Political Science/Public Policy/Statistics, August 2011

REFEREED JOURNAL PUBLICATIONS

1. Gallego, Maria, Norman Schofield, Kevin McAlister, and Jee Seon Jeon. "The variable choice set logit model applied to the 2004 Canadian election." Public Choice 158, no. 3-4 (2014): 427-463.

SUBMITTED MANUSCRIPTS, WORKING PAPERS, AND PAPERS IN PROGRESS

1. "Disagreement and Dimensionality: A Varying Dimensions Approach to Roll Call Scaling in the U.S. Congress" *Invited to Revise and Resubmit at the Journal of Politics*

2. "Measuring Election Frauds" (with Walter Mebane, Diogo Ferrari, and Patrick Wu) *Under Review.*

3. "Interval Estimation on the Marginal Likelihood"

4. "A Bayesian Nonparametric Approach to Estimating Group Dynamics in Roll Call Scaling"

AWARDS	Samuel Eldersveld Outstanding Paper Award for "Ordered Bayesian Aldrich-McKelvey Scaling: Improving Bias Correction on the Liberal-Conservative Scale". 2018-2019.

- Best paper presented at a professionally sponsored conference by a University of Michigan graduate student in 2018-2019.

John T. Williams Dissertation Prize, Society for Political Methodology. 2018.

- Best dissertation proposal in the area of political methodology.

Rackham Predoctoral Research Grant. Ann Arbor, MI. 2018.

Gerald R. Ford Fellowship, Ann Arbor, MI. 2018.

Gerald R. Ford Foundation Research Grant, Ann Arbor, MI. 2018.

Rackham Precandidate Research Grant. Ann Arbor, MI. 2018.

University of Michigan Distinguished Graduate Fellowship. Ann Arbor, MI. 2015.

EITM Alumni Travel Scholarship for the EITM Annual Meetings. Chicago, IL. 2013.

Washington University in St. Louis Distinguished Graduate Fellowship. St. Louis, MO. 2011

CONFERENCES AND INVITED PRESENTATIONS

Invited Talks:

- "Analyzing and Modeling Elections with Varying Party Bundles: Applications to Post-2010 British Elections." 2nd International Conference on Political Economy and Institutional Analysis (Baiona, 2012)
- "Money, Activism and Targeted Vote Maximization." Presented at Conference in Honor of Norman Schofield. CNISS, Washington University in St. Louis, April 26-27, 2013 (with Ian Turner).
- "Money, Activism and Targeted Vote Maximization." Presented at Institutions in Context: Inequality. Tampere, Finland, June 1-8, 2013.

Conferences:

- Annual Meeting of the Southern Political Science Association	2013,2017.
- Annual Meeting of the Midwest Political Science Association	2013,2015-2022.
- Annual Meeting of the American Political Science Association	2015-2022.
- Society for Political Methodology Annual Meeting	2016-2022.

TEACHING EXPERIENCE

Emory University, Department of Quantitative Theory and Methods:

- Introduction to Research Design	Fall 2020, Spring 2021, Fall 2021, Fall 2022
- Introduction to Bayesian Statistics	Spring 2021
- Introduction to Statistical Machine Learning	Spring 2022, Fall 2022, Spring 2023
- Measurement and Classification Research Lab	Spring 2022
- Faculty lead for QTM Capstone Project (UPS)	Spring 2023

Full Instructor at University of Michigan, Department of Political Science:

- Computing for the Social Sciences   Spring 2017

- Math Camp for Incoming Graduate Students   Fall 2018

Graduate Student Instructor (GSI) at University of Michigan, Department of Political Science:

- Congress and the Presidency with Lynn Rivers   Spring 2020

- Multivariate Data Analysis with Walter Mebane   Fall 2019

- Model Thinking with Scott Page   Fall 2017

Graduate Student Instructor (GSI) at Washington University in St. Louis, Department of Political Science:

- Intermediate Game Theory with Randy Calvert   Spring 2013

- Introduction to Statistics for the Social Sciences with Jacob Montgomery Fall 2012

SERVICE

Department Service
    Director of Undergraduate Research, Emory QTM Dept. (2022 - 2023)
      - Director for QTM honors program
      - Director for QTM fellows, interns, and research assistants
      - Coordinator for QTM capstone projects

Undergraduate Mentoring
    Honors students:
        Anna Ringwood (Psychology; 2022)
        Matt Zhang (Computer Science; 2023)
        Oliver Wang (Applied Math and Statistics; 2023)
        Ruth Nelson (Neuroscience and Behavioral Biology; 2023)
        Annie Luo (QTM; 2023; Chair)
        Manavi Anantula (QTM; 2023; Chair)
    Research:
        Summer Data Science for Social Good Practicum (2022,2023)
        Measurement and Classification Research Lab (2022)
        Summer Undergraduate Research Experience (2021)

Manuscript Referee
    The R Journal; American Journal of Political Science; American Political Science Review; Journal of Politics; Political Science Research and Methods; Journal of Statistical Software

University of Michigan Department Service

    Professional Development Committee (2017-2018)
    Undergraduate Honors Thesis Consultant/Reviewer (2019,2020)

PREVIOUS PROFESSIONAL EXPERIENCE

Data Scientist at Amazon (2013 - 2015)

- Responsibilities included creating new and innovative tools for extracting information from data related to large-scale A/B experiments. I also provided statistical consulting for projects across the Amazon behavioral science teams. I developed software for robot detection and throttling, an interaction tool that detected potential treatment effect conflicts between A/B experiments using real-time data, algorithms for server usage prediction during peak purchasing times, and a new fast-hash technique for assigning consistent experimental treatments across sessions on the site.

SOFTWARE **npfa** - R package that estimates a number of nonparametric factor analysis models with IBP priors on dimensions and DP priors on latent variables.
eforensics - R package to estimate fraud in elections using Finite Mixture Models
OBAM - R package to quickly estimate Bayesian Aldrich-McKelvey scaling models under extended-rank likelihood functions
iTrees - R package to estimate infinite tree hierarchical clusters using tree-structured stick breaking priors

PATENTS Systems for Determining Long-Term Effects in Statistical Hypothesis Testing (U.S. Patent 10,152,458 B1)