# Hane Lee (they/them)

hane.lee@columbia.edu www.hanelee.com

(+1) 857-500-3241

#### **EDUCATION**

Columbia University

PhD in Statistics

Committee: Michael Sobel (chair), Naoki Egami, Andrew Gelman, Zhiliang Ying

Massachusetts Institute of Technology

MS in Media Arts and Sciences, MIT Media Lab, Opera of the Future

BS in Electrical Engineering, minor in Music

New York, NY

2019 – Present

Cambridge, MA

Cambridge, MA

2017 – 2019

2013 – 2017

# RESEARCH INTERESTS

Political methodology; American politics; public opinion and polarization; race, ethnicity, and politics.

# PREPRINTS & WORKING PAPERS

*Under review.* "Measuring Public Opinion: "The Wasserstein Bipolarization Index", with Application to Cross-National Attitudes Toward Mandatory Vaccination for COVID-19", with Michael Sobel.

Working paper. "Measuring Social Ties from Roll Call Votes: A Fused Latent Factor and Social Network Approach", with Andrew Davison and Zhiliang Ying.

Working paper. "The Racial Margin of Victory for Minority Candidate Emergence", with Yuki Atsusaka and Diana Lee.

# **PUBLICATIONS**

Chris Andrade, Jonathan Auerbach, Icaro Bacelar, Hane Lee, Angela Tan, Mariana Vazquez, and Owen Ward (2023). "Does it pay to park in front of a fire hydrant?" Significance 20(1), pp. 28–30.

# CONFERENCE PRESENTATIONS

2024 Society for Political Methodology Annual Conference, oral presentation and discussion 2023 Society for Political Methodology Annual Conference, poster presentation 2022 Minghui Yu Memorial Conference, oral presentation

Research Assistant, Prof. Tod Machover, MIT Media Lab

2017-2019

- Designed and prototyped interactive augmented reality (AR) musical experiences
- Assisted production of hybrid electronic and acoustic live performances and post production editing

Undergraduate Research Assistant, Prof. George Verghese, MIT RLE

2016-2017

- Developed simulation-based markers of drug titration levels to guide physicians during procedural sedation using spatial pharmacokinetic/pharmacodynamic models

Intern, Ion Beam Applications (IBA) & Université Catholique de Louvain

2015

- Improved the collision detection system a proton therapy cancer treatment device, using Kinect point clouds and C++ based libraries PCL and CGAL.

Undergraduate Research Assistant, Dr. Stefanie Shattuck-Hufnagel, MIT RLE

2014

# TEACHING EXPERIENCE

# Columbia University

#### Instructor

Calculus-based Introduction to Statistics

Summer 2024

# Teaching Assistant

#### Graduate

Probability Theory	Fall 2020, Spring 2021, Fall 2021
Statistical Inference	Fall 2023
Accelerated Probability Theory/Statistical Inference	Fall 2022
Statistical Machine Learning	Spring 2022
Linear Regression Models	Spring 2023
Bayesian Statistics	Summer 2023

# Undergraduate

Introduction to Statistics / Statistical Reasoning

Spring 2020 / Fall 2019

# **SERVICE**

PhD Student Representative, Columbia Statistics Department	2021 - 2022
Minghui Yu Memorial Conference organizer	2022
Diversity, Equity, and Inclusion Committee, Columbia Statistics Department	2020 - 2023
Department Representative, Columbia GSAS Student Council	2020 - 2021

# **SKILLS**

Programming: proficient Python, R; practical MATLAB, javascript, C++

Languages: native English, Korean