# Haoyu Zhai

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### **EDUCATION**

### European University Institute, Florence, IT

■ PhD in Political and Social Science

Sep 2019 - Jun 2023

- Thesis: Papers in applied political methodology
- Supervisors: Prof. Miriam Golden & Prof. Elias Dinas
- Focus: Political methodology, network analysis, data analytics

### University of Oxford, Oxford, UK

MPhil in Politics (Comparative Government)

Sep 2017 – Jun 2019

- Thesis: A New Model of Party Positional Ambiguity
- Supervisor: Prof. David Rueda
- Focus: Party and electoral politics

### University of Bristol, Bristol, UK

BSc in Politics with Quantitative Research Methods

Sep 2014 - Jun 2017

- Dissertation: A Three-Channel Study of British Immigration Attitudes
- · Advisor: Dr Mircea Popa
- GPA: 4.0 (UK 80%, First Class Honours)

### PUBLICATIONS & WORKS IN PROGRESS

### **PUBLICATIONS**

- [1] "If not now, when? Climate disaster and the Green vote following the 2021 Germany Floods", with Susanna Garside, *Research & Politics*, Dec 2022.
- [2] "Median Voters, Mainstream Parties, and Electoral Competition", with David Rueda and Johannes Lindvall, *British Journal of Political Science*, *forthcoming*.

### WORKING PAPERS

- [1] "Political deliberation as network: an applied methodological note", in progress.
- [2] "Gathering, evaluating, and aggregating social scientific models of COVID-19 mortality", with Miriam Golden, Alex Scacco, Macartan Humphreys, Tara Slough et al., *in progress*.
- [3] "Estimating party (dis-)unity with formal prior: towards a Gamson-Cox approach", in progress.
- [4] "A new Bayesian scaling approach to estimating party position and issue salience", with Chendi Wang, *in progress*.
- [5] "Ideological Bias: Asymmetrical Polarization and Post-authoritarian Norms in Spain", with Elias Dinas and Ksenia Northmore-Ball, *in progress*.
- [6] "Vacancy chain models with application to the Chinese bureaucracy", with Arnout van de Rijt, *in progress*.

### CONFERENCES

- [1] <u>H. Zhai</u>, "A network-ERGM approach to studying political deliberation", in *CIVICA Data Science Days*, Florence, IT, Oct 2022.
- [2] <u>H. Zhai</u>, "Crowdsourced social scientific models of COVID-19 mortality", in *PolMeth XXXIX*, St. Louis, MO, Jul 2022.

### RESEARCH EXPERIENCE

### The Institutions and Political Inequality Research Unit, WZB Berlin

Visiting Researcher

Apr 2022 – Jun 2022; Oct 2022 – Present

- Projects: Multiple (independent and collaborative)
- Hosting Chair: Prof. Macartan Humphreys
- · Focus: Applied methodology, computational methods, data analysis

### Multi-Institutional Research Project, EUI, UC Riverside, Stanford, Toronto & WZB

Research Assistant

Sep 2020 – Feb 2021

- Project: The COVID-19 Model Challenges
- Steering Committee Co-Chairs: Prof. Miriam Golden & Prof. Alexandra Scacco
- Focus: Social and health sciences, knowledge accumulation, forecasting

### Nuffield College, University of Oxford Apr 2019 - Dec 2019 Research Assistant • Project: Main Party Strategies and Redistribution Preferences • Principle Investigators: Prof. David Rueda & Prof. Johannes Lindvall · Focus: Party and electoral politics, political economy, methodology Kellogg College, University of Oxford Jun 2018 Data Analyst · Responsibility: Data analysis, data management, data visualisation **TEACHING** Departments of Politics and Economics (Joint), EUI **EXPERIENCE** Sep 2020 - Jan 2021 Teaching Assistant Course: The Statistics of Causal Inference (Graduate) · Responsibility: Classroom assistance, lab sessions, exam preparation and grading • Syllabus: Causal inference, econometrics, advanced quantitative methods Worcester College, University of Oxford Apr 2019 - Jun 2019 Tutor in Politics (Teaching Assistant) Course: Political Sociology (Undergraduate) • Responsibility: Teaching, coursework assignment and grading, progress monitoring Syllabus: Political culture, social movement, ethnicity, nationalism, cleavage politics **AWARDS &** PolMeth Travel and Participation Award, Political Methodology Society Jul 2022 **SCHOLARSHIPS** Competitive grant for conference attendance and presentation • EUI Researchers' Mission Funding, EUI Apr – Jul 2022 Twice awarded for research exchange and conference attendance Jun - Aug 2021 ■ **EITM Certification Scholarship**, Princeton-EITM Full-tuition scholarship for attending advanced methods summer school Italian Ministry of Foreign Affairs "Grants for Foreigners" Programme, EUI 2019 - 2023Full-tuition scholarship with stipend for doctoral studies. One of 2 awardees ■ BITSS RT2 Training Scholarship, Berkeley-CEGA Sep 2020 Full tuition fee waiver for programme participation Graduate Research Expenses Fund, St Catherine's College, Oxford University Jul – Jun 2019 Twice awarded for attending conferences and advanced research training • UK Dissertation Prize (First Prize), UK Data Service Jul 2017 Awarded for best undergraduate research using quantitative research methods ■ Evelyn Miller-Barstow Prize, Bristol University Dec 2016 Awarded for best second-year performance in social science • **SPAIS International Scholarship**, Bristol University Nov 2014 Awarded to top international applicants. One of 2 awardees The WZB Berlin Social Science Center Apr – Jun 2022; Oct 2022 – Present OTHER **AFFILIATIONS** Berlin, Germany Visiting Researcher 2019 - Present Nuffield Centre for Experimental Social Science (CESS) Oxford, UK Pre-Doc Fellow & Affiliated Graduate Student **Data Science Summer School OTHER** Jul – Aug 2022

# TRAINING

Hertie School Data Science Lab (Online)

Modules: multi-modal systems modelling, NPL transformers, generative adversarial networks

### **Statistical Machine Learning**

Oct - Nov 2021

Università Bocconi (Online)

Modules: Bayesian networks, CART & BART, Gaussian process, shrinkage and selection

## The ICPSR Summer Program in Quantitative Methods of Social Research

Jun - Aug 2021

ICPSR (Online)

Modules: Bayesian modelling, statistical learning, social choice theory, game theory

### **Computational Economics for PhDs**

Jan - Apr 2021

Sciences Po (Online)

• Modules: computational methods, numerical optimisation, replication, Julia

# BITSS Research Transparency and Reproducibility Training (RT2)

Sep 2020

Online

Modules: Reproducible workflows, data sharing, evidence interpretation and synthesisation

### 2019 CESS/Essex Summer School

Jun – Jul 2019

Oxford, UK

• Modules: Experimental design, causal inference, RCTs, oTree and R

### Oxford Spring School in Advanced Research Methods

Mar - Apr 2018

Oxford, UK

• Modules: Causal inference, spatial analysis, machine learning, visualisation, R

**LANGUAGES** 

English, Chinese (Mandarin), Italian (Basic), German (Basic)

**SKILLS** 

R, Julia, Python, SQL, GitHub, LaTeX, Markdown, Microsoft Suite

**INTERESTS** 

Data science, data visualisation, programming, graphic design

### REFERENCES

### ■ Professor Miriam A. Golden

Peter Mair Chair of Comparative Politics European University Institute 9 Via della Badia dei Roccettini, 50014 Fiesole FI, Italy miriam.golden@eui.eu • +39-055-4685-233

### Professor Macartan Humphreys

Professor of Political Science & Director of Research Unit Columbia University & WZB Reichpietschufer 50, D-10785 Berlin, Germany macartan.humphreys@wzb.eu • +49-30-25491-369

### ■ Dr Tara Slough

Assistant Professor of Politics New York University 19 West 4th St, 206, New York, NY 10012, USA tara.slough@nyu.edu • +1-269-492-4178