## Gabe Schoenbach

gabe.schoenbach@gmail.com

gabeschoenbach.github.io | github.com/gabeschoenbach

## **EDUCATION** The University of Chicago

2016-2020

B.A., Mathematics

Minor: Computer Science

Dean's List, University Scholar Award, Odyssey Scholar

### RESEARCH

authors listed alphabetically by surname

PyEI: A Python package for ecological inference

In Journal of Open Source Software, Vol. 6 Issue 64. Aug. 2021

with Amariah Becker and Karin Knudson

## Implementing partisan symmetry: Problems and paradoxes

Political Analysis, forthcoming. [ArXiv].

with Daryl DeFord, Natasha Dhamankar, Moon Duchin, Varun Gupta,

Mackenzie McPike, Ki Wan Sim

### **PROJECTS**

## Models, Race, and the Law

<u>Yale Law Journal Forum</u>, Vol. 130, pp. 744-797. Mar. 2021 Research Assistant to Moon Duchin and Douglas M. Spencer

## **GerryChain**

Contributor

GerryChain is an open-source Python Markov chain Monte Carlo sampler to generate ensembles of political districting plans. I'm focused on incorporating a geographical hierarchy into our samples and fine-tuning local search techniques.

#### **Enumerating Graph Partitions**

I'm interested in frontier-based search techniques to fully enumerate the space of graph partitions, which helps us better understand the districting state space and benchmark new Markov chains.

#### **TALKS**

**County-Aware Redistricting Algorithms** 

October, 2021

UChicago Undergraduate Math Club

**Counting Graph Partitions** 

February, 2021

MGGG Graph Algorithms Meeting

**EI Considerations** 

November, 2020

MGGG Lab Meeting

## November, 2020

# Exploring Partisan Symmetry UChicago Undergraduate Math Club

#### LEADERSHIP

**The Institute of Politics**Speaker Series Chair, Student Advisory Board
Served as a liaison between students and IOP staff in regular meetings with senior IOP leadership including Director David Axelrod.

Undergraduate Admissions Office

Shift Leader

June 2017 – June 2020

Led trainings for undergraduate tour guides and worked with Admissions staff to help prospective college students through the application process.

**SKILLS** Experienced in Python, Julia, LaTeX, shell scripting, and Git.

INTERESTS NBA basketball (watching, not playing); Long-distance running (racing, not watching); blues piano (listening and playing); rock climbing