Gabe Schoenbach

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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	

A Workflow for Testing EI

February, 2021

MGGG Lab Meeting

Counting Graph Partitions

February, 2021

MGGG Graph Algorithms Meeting

EI Considerations

MGGG Lab Meeting

November, 2020

Exploring Partisan Symmetry

UChicago Undergraduate Math Club

November, 2020

ACTIVITIES & LEADERSHIP

The Institute of Politics

The University of Chicago

Speaker Series Chair, Student Advisory Board

June 2019 – June 2020

Served as a liaison between students and IOP staff in regular meetings with senior IOP leadership including Director David Axelrod.

Undergraduate Admissions Office

The University of Chicago

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.

Varsity Cross Country & Track and Field

The University of Chicago

Long-Distance Runner

August 2016 – June 2020

Managed a 20+ hour, 50+ mile weekly running commitment with a full

course load year-round.

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