

Gabe Schoenbach

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EDUCATION	The University of Chicago B.A., Mathematics Minor, Computer Science Dean's List, University Scholar Award, Odyssey Scholar	2016-2020
RESEARCH	<i>authors listed alphabetically by surname</i> PyEI: A Python package for ecological inference In <i>Journal of Open Source Software</i> , Vol. 6 Issue 64. Aug. 2021 with Amariah Becker and Karin Knudson Implementing partisan symmetry: Problems and paradoxes <i>Political Analysis</i> , forthcoming. [ArXiv]. with Daryl DeFord, Natasha Dhamankar, Moon Duchin, Varun Gupta, Mackenzie McPike, Ki Wan Sim	
PROJECTS	Models, Race, and the Law <i>Yale Law Journal Forum</i> , Vol. 130, pp. 744-797. Mar. 2021 Research Assistant to Moon Duchin and Douglas M. Spencer <u>GerryChain</u> <i>Contributor</i> 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. <u>Enumerating Graph Partitions</u> 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	<u>County-Aware Redistricting Algorithms</u> UChicago Undergraduate Math Club	October, 2021
	<u>Counting Graph Partitions</u> MGGG Graph Algorithms Meeting	February, 2021
	<u>EI Considerations</u> MGGG Lab Meeting	November, 2020

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