Thomas Sachen

tomsachen@gmail.com (262) 914-8590. I am a mathematician interested in geometry, topology, and logic. I aim to apply these to hard and impactful problems in data science, machine learning, and computing.

Education

Princeton University, Princeton, NJ A.B. in Mathematics. 09/2018-05/2023.

Research

Princeton University, Princeton, NJ Undergraduate researcher. 05/2022-05/2023.

- p-adic Hodge theory and topological data science.

Tufts University, Medford, MA NSF REU researcher. 05/2021-09/2021

- computational approaches to geometric group theory.

Georgia Inst. of Technology, Atlanta, GA NSF REU researcher. 05/2020-09/2020

- low-dimensional topology and knot concordance.

The University of Chicago, Chicago, IL Stone Edge Intern. 02/2018-09/2018

- astrophysics imaging and data processing.

Other Experience

Princeton University Math Department, Princeton, NJ Tutor, Colloquium Coordinator . 08/2022-05/2023.

- Tutor for advanced math courses. Organized departmental talks.

Art of Problem Solving

Teaching Assistant, Grader. 03/2020-09/2021

- Graded and tutored advanced high school students in math.

WPRB FM, Princeton, NJ Station Manager, Music Director. 10/2019-05/2023

- Managed the 40+ staff members and multi-million dollar endowment of Princeton's community radio station.

Skills

Python, Wolfram, MATLAB, Javascript, SQL

Data science/algo. dev.

Advanced mathematics, research.

Awards + Publications

Sigma Xi Honor Society

List of publications + talks can be found at tomsachen.github.io

Links

linkedin.com/in/thomas-sachen

tomsachen.github.io

github.com/tomsachen