David Owen Horace Cutler

Boston, MA   david.cutler@tufts.edu   davidohcutler.github.io   davidohcutler

Education

Tufts University   *Sept. 2022 – present*
BS in Mathematics

- GPA: 4.0/4.0
- **Coursework**: Real Analysis I, Real Analysis II, Analysis*, Functional Analysis*, Harmonic Analysis, Abstract Algebra I, Abstract Algebra II, Algebra II*, Topics in Algebra, Differential Forms in Algebraic Topology*, Differential Geometry*

  (* denotes graduate-level coursework)

Experience

Undergraduate Researcher   *College Park, MD*
University of Maryland   *June 2024 – July 2024*

- Participated in research on the interactions between complex and complex geometry with Professor Tamás Darvas and some fellow undergraduates.
- Proved many novel results, culminating in a paper.
- Presented research at multiple conferences, including the AMS-MAA-SIAM special session on undergraduate research at JMM 2025.

Real Analysis Grader/TA   *Medford, MA*
Tufts University   *Sept. 2023 – present*

- Served as the primary grader for the first class in Tufts' undergraduate real analysis sequence, grading the majority of each weekly problem set.
- Hosted weekly office hours and practicums.
- Voluntarily and independently held small tutoring sessions, as well as exam review sessions.

Publications

The Hausdorff distance and metrics on toric singularity types   Nov. 2024
A. Aitokhuehi, B. Braiman, ***D. Cutler***, T. Darvas, R. Deaton, P. Gupta, J. Horsley, V. Pidaparthy, J. Tang

preprint, [arxiv:2411.11246](https://arxiv.org/abs/2411.11246)

Awards

Martin Guterman Award   *Medford, MA*
Tufts University   *April 2024*

- Awarded to the first or second-year student at Tufts University with the highest academic achievement in math.

Additional Skills

Languages: English, Danish, Mandarin Chinese (limited proficiency)

Programming Languages: Python, Rust, and LaTeX