

# David Owen Horace Cutler

Department of Mathematics, Tufts University

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<https://davidohcutler.github.io/>

## Research interests

Complex geometry, metric geometry

## Education

**B.S. in Mathematics**, Tufts University, expected May 2026

*GPA*: 4.0

*Coursework*: Real Analysis I, Real Analysis II, Harmonic Analysis, Abstract Algebra I, Abstract Algebra II, Topics in Algebra, Analysis<sup>†</sup>, Functional Analysis<sup>†</sup>, Complex Analysis<sup>†</sup>, Algebra II<sup>†</sup>, Differential Forms in Algebraic Topology<sup>†</sup>, Differential Geometry<sup>†</sup>, Alexandrov Geometry<sup>†</sup>

<sup>†</sup>Graduate-level coursework.

## Publications

*The Hausdorff distance and metrics on toric singularity types* (with A. Aitokhuehi, B. Braiman, T. Darvas, R. Deaton, P. Gupta, J. Horsley, V. Pidaparthi, J. Tang), preprint, arxiv:2411.11246

## Program participation

UMD REU, convex and complex geometry with Professor Tamas Darvas, Jun–Jul. 2024

DIMACS REU, complex geometry with Professor Chi Li, May–Jul. 2025

UCSD research mini-course, complex geometry, Jul. 2025

## Teaching experience

Real analysis, teaching assistant, Sep. 2023–Dec. 2024, Sep. 2025–

Differential equations, grader, Jan. 2025–May 2025

## Reading groups

Geometric group theory with Professor Nima Hoda, Feb. 2025–present

## Talks

*Holder estimates for the Hausdorff distance and a quasi-metric*, AMS-MAA-SIAM Special Session on Research in Mathematics by Undergraduates, Joint Mathematics Meetings, Jan. 2025

## Awards and honors

Martin Guterma Award, Apr. 2024

Goldwater Scholarship, Mar. 2025

Sigma Xi, Jun. 2025