

Justin Katz

Curriculum Vitae

Education

- 2011–2015 **B.A. Mathematics**, *Reed College*, Portland, Oregon.
Spent Fall 2013 semester in Budapest, through Budapest Semesters in Mathematics
- 2015–present **PhD candidate**, *Purdue University*, West Lafayette, Indiana.

Research Experience

- Summer 2014 **Research in computer vision, through algebraic geometry**, *Reed College*, Portland, Oregon.
Advised by: Irena Swanson, Supported by Reed College Science Fellowship Grant
- Fall 2014–
Spring 2015 **Undergraduate thesis on Laplacian eigenfunction decomposition of function spaces via Friedrichs self-adjoint extensions of unbounded positive symmetric operators**, *Reed College*, Portland, Oregon.
Advisor: Jerry Shurman
- Fall 2014 **Independent study on differential topology and Morse theory**, *Reed College*, Portland, Oregon.
Working under: Kyle Ormsby
- Spring 2015 **Independent study on topological modular forms**, *Reed College*, Portland, Oregon.
Working under: Kyle Ormsby

Awards

- Summer 2014 **Reed College Science College Science Fellowship Grant**, *Reed College*, Portland, Oregon.
- Summer 2018
(yearlong) **Purdue Research Fellowship**, *Purdue University*, West Lafayette, Indiana.

Teaching Experience

- Fall 2012 **Volunteer Tutor**, *Franklin High School*, Portland, Oregon.
- Fall
2012–Present **Professional tutor through WyzAnt inc.**, Portland, Oregon.
- Fall 2014 **Drop in tutor at Reed math help center**, *Reed College*, Portland, Oregon.
- Fall 2014 **Paper grader for multivariable calculus**, *Reed College*, Portland, Oregon.
- Fall 2016 **Recitation instructor: Multivariable Calculus**, *Purdue University*, West Lafayette, Indiana.
- Spring 2017 **Recitation instructor: Multivariable Calculus**, *Purdue University*, West Lafayette, Indiana.
- Fall 2017 **Recitation instructor: Multivariable Calculus**, *Purdue University*, West Lafayette, Indiana.
- Spring 2018 **Instructor: Introduction to Riemannian Geometry (Reading course, with 3 undergraduates)**, *Purdue University*, West Lafayette, Indiana.
- Spring 2018 **Recitation instructor: Multivariable Calculus**, *Purdue University*, West Lafayette, Indiana.
- Spring 2019 **Recitation instructor: Multivariable Calculus**, *Purdue University*, West Lafayette, Indiana.

Fall 2020 **Recitation instructor: Multivariable Calculus**, *Purdue University*, West Lafayette, Indiana.
Spring 2021 **Instructor: Applied Calculus**, *Purdue University*, West Lafayette, Indiana.
Fall 2021 **Recitation instructor: Multivariable Calculus**, *Purdue University*, West Lafayette, Indiana.
Fall 2021 **Instructor: Abstract Algebra (Reading course, with 5 undergraduates)**, *Purdue University*, West Lafayette, Indiana.
Fall 2021 **Instructor: Galois Theory (Reading course, with 3 undergraduates)**, *Purdue University*, West Lafayette, Indiana.

Publications

Arapura, D., Katz, J., McReynolds, D.B. et al. Integral Gassman equivalence of algebraic and hyperbolic manifolds. *Math. Z.* 291, 179–194 (2019).
<https://doi.org/10.1007/s00209-018-2077-2>.