ben@benkraft.org **Benjamin J. Kraft** www.benkraft.org

Education

Massachusetts Institute of Technology: S.B. in mathematics, GPA 5.0/5 *2011–2015*
- Minors in physics and political science

Work Experience

Khan Academy: Software engineer *2015–present*
- Engineer on the infrastructure team
- Tech lead of a six-engineer, five-month project improving making significant changes to content tooling to support more flexible content localization and curricular alignment
- Other projects include internal infrastructure improvements, deploy and development tools, infrastructure for zero-rating, and A/B testing

Khan Academy: Software engineering intern *Summer 2014*
- Worked on performance tooling and tuning, decreasing cloud server costs, and A/B testing framework

Extracurricular Activities & Volunteer Work

MIT Educational Studies Program: Organized programs for middle and high school students *2011–2015*
- Chair of ESP for 2013; led the organization, advised program directors and make sure important tasks happened, organized discussions about policy, and worked with MIT offices
- Directed Splash 2012, a weekend program for 3000 middle and high school students; organized teachers, students, and volunteers, made policy and logistical decisions, and led the team of around 40 administrators for the biggest Splash to date
- Directed Spark 2014, a weekend program for 1000 middle school students
- Directed Spring HSSP 2012, an 8-week program for 300–400 students
- Taught classes on math, physics, programming, political science, and origami for several programs

Learning Unlimited: Working to spread Splash across the country *2014–present*
- Member (2015–2017) of the Board of Directors
- Mentor of Splash programs at Smith, Brandeis, UCSD, and USC
- Contributor to the website used by Splash programs across the country

MIT Association of Student Activities: President *2014–2015*
- Worked with students and MIT administrators to oversee and advocate for MIT's 500 student groups

MIT Faculty Policy Committee: Student representative to MIT Faculty Policy Committee *2014–2015*

MIT Mystery Hunt: Member of the Mystery Hunt writing teams for the 2013 and 2015 hunts *2012–present*

Research

"Determining the Structure of Length-k Steenrod Operations as $A(r)$-Modules", ongoing research in algebraic topology with Prof. Mark Behrens at MIT *2013–2014*
- Presented poster at Joint Math Meetings 2014

"Diameters of Groups Generated by Transposition Trees", paper in combinatorics, researched at the University of Minnesota Duluth Research Experience for Undergraduates *2012*
- Published in *Discrete Applied Mathematics* in March 2015

"On Conjugacies of the $3x + 1$ Map Induced by Continuous Endomorphisms of the Shift Dynamical System", paper in pure math with Keenan Monks, mentored by Kenneth G. Monks *2009*
- Published in *Discrete Mathematics* 310 (2010)

Interests & Hobbies

- Piano, origami (especially modular), board games, hiking