# Hermish Mehta

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# Education

## University of California, Berkeley, *California* [2017-21]

B.S. Electrical Engineering & Computer Sciences B.S. Engineering Mathematics & Statistics Grade Point Average: 4.0/4.0

## University of Toronto Toronto, Ontario [2013-17]

Classes in Mathematics and Computer Science

Grade Point Average: 4.0/4.0

University of Toronto Schools Toronto, Ontario [2013-17]

# Research Experience

## Department of Mathematics, University of California, Berkeley Research Assistant [2018-]

- Studying constant factor balanced-cut approximation algorithms in semi-random graphs
- Attempting to improve power of current algorithms through reducing input restrictions
- Working through Berkeley's graduate Beyond Worse-Case Analysis class

# Computational Cognitive Science Lab Research Assistant [2017-]

- Studying rational models of curiosity and belief change to develop insights about cognition
- Building Bayesian models to quantitatively predict and explain cognitive phenomena
- Applying statistical methods to analyze Big Data from online user interactions

#### Concepts and Cognition Lab Research Assistant [2017-]

- Studying curiosity as a psychological phenomenon and its interplay with an individual's social context
- Designing, administrating and evaluating web-based studies to answer research questions
- Invited talk at the 40th Annual Conference of the Cognitive Science Society

#### Department of Psychology, University of Toronto Research Assistant [2017]

- Studied potential evidence-based positive education interventions under Dr. Jeffrey Graham
- Developed and refined predictive models of student performance using Scikit-Learn

## Industry Experience

#### CodeBase Berkeley Software Developer [2017-]

- Working with a small team to develop software for clients, Bay Area start-ups, Riffyn and Polymorph
- Used machine learning and linear optimization techniques to predict and maximize ad revenue
- Built an intuitive web-based UI for scientists to visualize data and perform regressions in Python

## Parlay Ideas and AvatarMe Developer and Research Intern [2016]

- Researched education technology to design a virtual environment to gamify education
- Implemented a live twitter feed into the game, programmed with Unity and C sharp
- Prototyped an Amazon Aws noSQL database transition with engineers

# **Publications**

Asterisks indicate equal contribution.

#### Conference Papers

1. {Forthcoming} Mehta, H.\*, Dubey, R.\*, & Lombrozo, T. (2018). Your liking is my curiosity: a social popularity intervention to induce curiosity. To appear at the 40th Annual Conference of the Cognitive Science Society.

# Awards & Honors

Student Mentoring and Research Teams Summer Research Fellowship [2018] Cognitive Science Society Invited Oral Presentation [2018] College of Engineering Dean's Honors List [2017-18] University of California, Berkeley Honors-to-Date [2017-18]

Edward Frank Kraft Award for Freshmen [2017] Silver Medalist at the 49<sup>th</sup> International Chemistry Olympiad [2017] Ninth place in the National Biology Contest [2017]

Invited to the 48<sup>th</sup> International Chemistry Olympiad [2016] First place in the Canadian Chemistry Contest [2016] First place at the DECA International Career Development Conference [2015]

# Teaching Experience

## University of California, Berkeley, California

CS 61A, Structure and Interpretation of Computer Programs Course Tutor [2018] CS 70, Discrete Mathematics & Probability Theory Computer Science Mentors [2017]

#### University of Toronto, Ontario

Math 102, Introduction to Mathematical Proofs Study Group Leader [2015-17] Math 135, Calculus Study Group Leader [2016] Economics 100, Introduction to Economics Study Group Leader [2015]

## Activities

#### IEEE-Eta Kappa Nu Honor Society Service Officer [2018-]

- Helping organize and run outreach events for middle and high school students
- Led a workshop around data analysis, visualization and statistical learning for students
- Volunteered for SWE, mentoring four students over 10 weeks to complete an Arduino project

Tau Beta Pi Engineering Honor Society Member [2017-]