# Hermish Mehta

University of California, Berkeley Berkeley, CA 94720

# Education

# University of California, Berkeley (Berkeley) [2017-21]

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

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

Classes in Mathematics and Computer Science during High School

Grade Point Average: 4.0/4.0

University of Toronto Schools [2013-17]

# Research Experience

#### Computational Cognitive Science Lab, Princeton University 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 processes
- Applying statistical methods to analyze big data from online user interactions

#### Department of Mathematics, Berkeley Research Assistant [2018]

- Studied constant factor approximation algorithms in semi-random graphs under Luca Trevisan
- Applied spectral methods and semi-definite programming to design algorithms
- Used geometric and algebraic analysis techniques to prove approximation guarantees

#### Concepts and Cognition Lab, Berkeley Research Assistant [2017-18]

- Studied the dynamic between social environment and curiosity to inform interventions
- Designed, conducted and analyzed studies to help answer research questions
- Work presented at the 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 software engineers

# **Publications**

Asterisks indicate equal contribution.

#### Conference Papers

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

## Awards & Honors

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

Edward Frank Kraft Award for Freshmen [2017] International Chemistry Olympiad Silver Medal [2017] National Biology Contest Ninth Place [2017]

International Chemistry Olympiad *Invitation* [2016] Canadian Chemistry Contest *First Place* [2016] DECA International Career Development Conference *First Place* [2015]

# Activities & Teaching

### EECS Department, Berkeley Teaching Assistant [2018-]

- Lead weekly discussions for Discrete Mathematics & Probability Theory (CS70)
- Wrote a series of notes, around 60 pages, for the course covering mostly discrete math
- Previously helped teach algorithms, programming, proofs, calculus and economics

#### 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