

# Michael Zhang

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## EDUCATION

### University of California, Berkeley

Berkeley, CA

B.A. in Computer Science, Mathematics, and Economics

Expected May 2017

- GPA: 4.0/4.0, SAT: 2400, Regents and Chancellor's Scholar (awarded to top 1% of incoming class)

## EXPERIENCE

### Palantir Technologies

Palo Alto, CA

Forward Deployed Software Engineer Intern

May – August 2015

- Did exploratory data mining and analysis on millions of rows of data using unsupervised (hierarchical, k-means clustering) and supervised machine learning (random forests), econometrics (differences in differences) and basic natural language processing. (Java, Spark, Pandas, Numpy, Scipy, Scikit-Learn)
- Designed data schema and architected metric pipeline, organizing a team of 10 to execute. (Java, Spark)
- Built custom analytics dashboards. (Java, PostgreSQL, CSS)
- Ideated and researched multiple new workflows, and led team of 9 to prototype them for a demo. (Java)
- Worked on ad hoc strategy consulting with client and system administration and helped onboard full timers.

### Redfin

San Francisco, CA

Software Developer Intern

May – August 2014

- Implemented new version of UI widget on main listings page. (Dojo Toolkit, LESS)
- Refactored backend on widget to use new data serialization format to improve performance and extensibility. (Java, Spring, Hibernate)
- Developed embeddable widget for third party sites, optimized for SEO. (HTML, CSS, Javascript)
- Created internal analytics dashboard to monitor performance. (Python, Java, APIs, PostgreSQL)

### UC Berkeley Economics Department

Berkeley, CA

Research Assistant

February 2014 – May 2015

- Assisted in design and execution of empirical economic studies with Professor Stefano DellaVigna.
- Examined literature and helped design a randomized controlled trial related to evaluating expert predictions.
- Reviewed literature in the economics of media and the empirical pricing behavior of commercial firms.

### MIT Mathematics Department

Cambridge, MA

Research Intern

January 2011 – January 2012

- Conducted graduate level research in representation theory and algebraic geometry while in high school.
- 2011 Siemens Competition Regional Finalist: one of top 96 STEM students in US for research. Top prize was \$100k.
- Presented at conferences, coauthored paper with Prof. Pavel Etingof.

### Ross Mathematics Program, Ohio State University

Columbus, OH

Junior Counselor

Summer 2011

- Tutored elite math students from around the world in number theory and abstract algebra.

## PUBLICATIONS AND PREPRINTS

### Poisson Traces in Positive Characteristic (w/ Y. Chen, P. Etingof, and D. Jordan)

2012

*arXiv:1112.6385v1 [math.SG]*, Submitted to *Journal of Applied and Pure Algebra*.

## TECHNICAL SKILLS

Fluent: Python, Java

Proficient: Javascript, Scheme, C, MIPS Assembly, HTML/CSS, LaTeX, Apache Spark, Machine Learning, Git, Vim

Exposure: Dojo Toolkit, Hadoop, R, LESS, Stata, Bash

## TECHNICAL COURSEWORK, LANGUAGES

Math: Theoretical Linear Algebra, Abstract Algebra, Real Analysis, Complex Analysis, Multivariable Calculus, Number Theory, Probability Theory, Differential Topology, Stochastic Processes, Econometrics, Applied Econometrics (current)

Computer Science: Structure and Interpretation of Computer Programs, Data Structures, Computer Architecture, Algorithms, Databases (current), Operating Systems (current)

Languages: Mandarin Chinese (Native Speaker)