# 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 helped with system administration.

### Redfin

San Francisco, CA

May – August 2014

- Software Developer Intern
  - 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, Git, Vim

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

#### TECHNICAL COURSEWORK AND LANGUAGES

<u>Math:</u> Theoretical Linear Algebra, Abstract Algebra, Real Analysis, Complex Analysis, Multivariable Calculus, Number Theory, Probability Theory, Differential Topology, Stochastic Processes, Econometrics, Applied Econometrics (current) <u>Computer Science:</u> Structure and Interpretation of Computer Programs, Data Structures, Computer Architecture, Algorithms, Databases (current), Operating Systems (current)

<u>Languages</u>: Mandarin Chinese (Native Speaker)