# David Mingfei Liu

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#### Education

### • Princeton University

B.S.E in Computer Science + Certificate in Statistics and Machine Learning (2018) Major GPA 3.84/4.0, Overall GPA 3.70/4.0

Coursework includes: Probability and Stochastic Systems, Machine Learning and AI, Neural Networks, Analysis of Big Data, Social Networks, Fairness in Machine Learning, Applied Social Statistics, Applications in Econometrics.

• Thomas Jefferson High School for Science and Technology (2014)

## **Projects**

• Replicating and ensembling models from the fragile families challenge Advisor: Matthew Salganik Aug 2017 - Present

Constructing a community model of both social science and machine learning approaches to predicting the outcomes of disadvantaged children. Peer-reviewed paper on computational reproducibility in progress.

https://github.com/dliu18/papers/blob/master/fragile\_families.pdf

• Analyzing language trends in post-secondary FERPA notices

Advisor: Arvind Narayanan Feb 2017 - Jun 2017

Scraped education policy documents from the web and used SVM classification to isolate FERPA notices. Data used to survey the current state of education policy compliance.

https://github.com/dliu18/papers/blob/master/legal\_nlp.pdf

• Sentiment analysis of archived collegiate newspaper headlines

Advisor: Brian Kernighan Sep 2016 - Jan 2017

Created an interactive, public n-gram viewer based on the electronic archives of Princeton's student-run campus newspaper.

https://github.com/dliu18/papers/blob/master/digital\_humanities.pdf

# Industry Internships

• The New York Times - Software Intern

Summer 2017

Architected backend supporting the renovation of the My Account page of the New York Times, increasing site usability. Renovated site launched in October 2017. Initiated side project with the NYT Data Science team, improving visualization of readership data from embedded static files to native, interactive Google Charts.

• HookLogic Inc. - Data Science Intern

Summer 2016

Reduced data analysis overhead time for team by initiating Hive queries on AWS clusters to analyze performance of machine learning models.

# Awards and Honors

- Dean's List: Placed on college list on the basis of cumulative academic standing following junior year.
   Jun 2017
- Daily Princetonian Award for Excellence in Sports Writing: Annual award given to staff member demonstrating superior writing.

  Jun 2016
- Residential College Advisor Scholarship: One of 30 campus advisers chosen from class on the basis of leadership and character. Responsibilities include building community among 20 freshmen for one year. Monetary compensation of \$20k, covering room and board.

  Jun 2016

## Co-curricular Activities

- Peer Academic Advisor, Princeton University: Provide academic assistance to freshmen and sophomores with choosing courses, majors and independent projects at Princeton University 2016 - 2017
- Undergraduate Lab Teaching Assistant, Princeton University: Provide debugging and conceptual assistance on programming assignments for introductory Computer Science courses; assist the head Lab TA in the smooth functioning of the Lab TA program 2015 - 2016

# Activities

- Extracurricular Sports Editor, The Daily Princetonian: Led section of a dozen staff writers to publish a daily paper covering Princeton athletics news and issues of concern. Articles can be found at http://www.dailyprincetonian.com/staff/david-liu, featuring sports data analytics and visualization. 2014 - 2017
  - Co-President, Princeton Brown Food Co-operative: Point of contact for self-sustaining student body, in which members cook meals for the co-operative on 2016 - Present a weekly basis.