

# Peter Zhang

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## Education

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### University of California, Berkeley

Berkeley, CA

Computer Science and Economics B.A.; 4.00 Cumulative GPA

Class of 2024

- **Coursework** Data Structures, Discrete Math and Probability, Functional Programming, Linear Algebra, Statistics
- **Activities** Voyager Consulting, Debate Society at Berkeley, Computer Science Mentors, Berkeley Economic Review

## Experience

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### National Institute of Standards and Technology

Gaithersburg, MD

Applied Economics Research Intern

May 2020–Sep 2020

- Annotated 50+ papers on resilience planning to find trends in how co-benefits are treated in benefit-cost analysis
- Wrote case study of wildfire-resistant retrofits by estimating and comparing 10 sources of costs/benefits in Excel
- Published user manual for Edge\$, an online decision-making software for community resilience projects

NLP Research Intern

Jun 2019–Aug 2019

- Wrote Python scripts to preprocess corpora and construct subject-predicate-object tuples with NLTK/Gensim
- Improved Latent Dirichlet Allocation topic modeling using root-and-rule preprocessing in Jupyter Notebook trials

### National Cancer Institute

Rockville, MD

Data Visualization Research Assistant

Jul 2019–Apr 2020

- Scraped and reformatted 1 billion+ gene expression datapoints from drug trials to expedite user queries
- Co-authored R Shiny app for dynamic plotting/analysis and created an Electron-based MacOS deployable

### Premier Debate America

Los Angeles, CA

Product Manager

Dec 2018–Present

- Lead bi-monthly publication of 200+ pages of topic research used freely by thousands of debaters nationwide
- Design and maintain premierdebate.com using Wordpress and CSS/Javascript with 67,000 visitors in 2019

## Projects

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### WikiGrab

Jul 2020–Present

- Repository of publicly disclosed debate speeches and tournament entries scraped with Python
- Building R shiny interface to conduct dynamic analysis of disclosure practices and competition results

### World4

Apr 2019

- Carrying capacity model based on Spearman correlation and regression of 20+ environmental indicators
- Awarded top 6 in the US in the International Mathematics Modeling Competition for rigor and innovation

### Eye Coach

Jan 2019

- Swift app using augmented reality and Haar cascades to help people with autism train eye contact
- Built in 24 hours at Hack Pennsylvania, winning best-in-show among 100+ other participants

### Roller Coaster Ranker

Nov 2018

- Neural network that predicts ratings from auto-encoded coaster features like height, speed, location, etc.
- Awarded finalist in the international High School Mathematics Challenge in Modeling among 280+ teams

## Skills

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**Languages** Python/Jupyter, R w/ Shiny, Java, SQL, HTML/CSS/Javascript, MATLAB

**Tools** Git/Terminal, VS Code/IntelliJ/Android Studio, WordPress, Electron

## Awards

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UC Berkeley Leadership Award; Recipient

Jul 2020

USA Computing Olympiad; Platinum Division

Apr 2020

American Regions Mathematics League; 8th Place

Jun 2019