

# David Zeng

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## EDUCATION

### CARNEGIE MELLON UNIV.

#### BS IN COMPUTER SCIENCE

Expected May 2019

Cum. QPA: 4.00

## COURSEWORK

(15312) Programming Languages  
(10701) Machine Learning (Graduate)  
(21270) Mathematical Finance  
(15751) Theorist's Toolkit (Graduate)  
(15359) Probability and Computing  
(15210) Parallel Algorithms  
(15213) Computer Systems

## SKILLS

### LANGUAGES

Experienced

C • Java • JavaScript • Python  
HTML/CSS • OCaml • SML

Familiar

C++ • Rust • Scala

## AWARDS

Putnam Top 500 (2015, 2016)  
ACM ICPC Regionals 10th/130 (2015)  
CMU Quant Competition First Place  
(2017)  
USA Computing Olympiad Finalist  
(2014)  
Codeforces Rating 1729 (Present)  
TartanHacks (2017)

- Won Student Impact First Prize

## EXPERIENCE

### ADDEPAR | SOFTWARE ENGINEERING INTERN

May 2017 – Aug 2017 | Mountain View, CA

- Worked on data pipeline, adding a service to parse data from S&P Corporate Actions feed and model numerous kinds of corporate actions. Built a dashboard to search through corporate actions.
- Improved internal financial entity lookup service to support listing level data.

### LEANPLUM | SOFTWARE ENGINEERING INTERN

May 2016 – Aug 2016 | San Francisco, CA

- Rewrote user permissions system, adding more granularity and customization. Worked in **Python** and integrated authentication into existing pages. Created frontend permission interface using **AngularJS**.
- Added front-end latency monitoring. Defined and tracked metrics for user perceived latency.

### TEACHING ASSISTANT | CMU SCHOOL OF COMPUTER SCIENCE

Aug 2016 – Dec 2016

- 15-151 Mathematical Foundations for Computer Science
- Lead recitations, going over topics in discrete math and developing problem solving intuition

## PROJECTS AND ACTIVITIES

### CARNEGIE MELLON SOLAR RACING | OPTIMIZATION TEAM LEAD

Sep 2015 - Present | CMU student organization

- Lead design of new system of sensors to monitor power and propulsion system of a racing boat
- Integrated with Android application that formats and displays data to driver

### KEYMAERAX | UNDERGRADUATE RESEARCH

Jan 2017 – Present | KeyMaeraX

- Worked on a counter example search tool for models of cyber-physical systems.
- Efficiently transformed problem into graph search and tested various heuristics
- Written in **Scala**

### COURSE VIEWER

Feb 2017 | Course Planner

- Allow CMU students to import their transcript and visualize all courses they satisfy the prerequisites for as a graph
- Made visualizations using **d3.js**.

### CS RANKINGS

Dec 2016 - Jan 2017 | cs-rank

- Built Markov Chain representing which PhD programs top CS departments hire from.
- Used PageRank to creating rank CS graduate schools, with subcategories for various fields.