# Troy Zhang

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## EDUCATION

**UNIVERSITY OF CALIFORNIA, BERKELEY**                                    **Berkeley, CA, USA**

- **Year:** Junior
- **Double Major (prospective):** *B.A. in Computer Science & Statistics*
- **Expected Graduation:** Spring 2019
- **GPA**: Major GPA: 3.85 / 4.0; Overall GPA: 3.88 / 4.0

## CORE QUALIFICATIONS

- **Programming Languages:** C, Ruby/RSpec, Python, Java, R, XML, SQL, Scheme
- **Specialties:** Computer networking, Software engineering, Database Management (Redis), Data Analysis
- **Software:** R Studio, Latex, Microsoft office, PowerPoint
- **Languages:** English (bilingual), Chinese (native), Japanese (fluent)

## INTERNSHIP EXPERIENCE

- **Software Designer/Engineer @IBM Aspera**                              **May – August, 2017**
  - Core team member of Aspera, Inc.
  - Maintained and accelerated the core codebase of Fasp® fast data transfer protocol
  - Implemented interface for Azure-files storage type
  - Developed new features including access key lock, etc.

## PROJECT EXPERIENCES

- **Pacman** (Core ideas: DFS, BFS, UCS, A* search; Product: An suboptimal Pacman AI)        **September, 2017**
- **Approximate Algorithm for Knapsack Problem**    (Core ideas: Dynamic Programming, Greedy Algorithm with heuristic values, pseudo-polynomial runtime)        **May, 2017**
- **Performance Programming**   (Core ideas: CNN, SIMD, Multi-thread Programming, MapReduce)        **April, 2017**
- **NBA Salary-Efficiency Study** (Core ideas: web scraping, data analysis, data visualization; Product: A thorough & exhaustive report with concrete analysis & organized demonstrations)        **November, 2016**

## COURSE WORKS

- CS 188 **(Intro to AI)**
- CS 186 **(Database)**
- CS 61A
- CS 61B
- CS 61C
- CS 162 **(OS Programming)**
- CS 170 **(Efficient Algorithms)**
- CS 70
- STAT 133
- STAT 134

## OTHER EXPERIENCES

- **LAB ASSISTANT OF CS 61B** (Help out in the labs, office hours and guerilla sections)        **January – May, 2017**
- **LAB ASSISTANT OF CS 61A**                                             **September – October, 2017**
- **BLOCKCHAIN COLLIDER EXPERIMENT** (Participated in the event as a member of a group of five people, studied several major cases of applications of Block chain)        **March – April, 2016**