# Ziyuan Zhong

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#### **Education**

Columbia University

New York, NY

**Bachelor degree in Computer Science** 

2017 - 2019

**GPA: In Progress.** Fundamentals of Computer Systems, Advanced Programming, Computer Networks, Machine Learning, Optimization I

Reed College

Portland, Oregon

Bachelor degree in Mathematics(Computer Science concentration)

2014 - 2017

**GPA: 3.8/4.0.** Calculus, Analysis, Multivariable Calculus I& II, Linear Algebra, Abstract Algebra, Computer Fundamentals I& II, Algorithms and Data Structures, Computability and Complexity, Cryptography, Topic in Computer System, Probability, Mathematical Statistics, Applied Differential Equations\*(at PSU).

### Research Experience

#### REU CAAR-2017 at University of Maryland, College Park

Jun – Aug. 2017

I worked in a research group led by professor Tom Goldstein at University of Maryland, College Park on building a high-quality software package in both Matlab and Python on the phase retrieval problem. The package now consists of more than 12 different PR algorithms and supports benchmarking customized algorithm against them on both real-world dataset and synthetic dataset. The software package's website can be found at https://www.cs.umd.edu/~tomg/projects/phasepack/. The paper for it can be found at https://arxiv.org/pdf/1711.10175.pdf

#### **Technical Skills**

**Proficient:** Python

**Intermediate:** C/C++, Matlab, Latex, Javascript

Experience: R, HTML/CSS, Java, Mathematica, SML of NJ

## **Honors and Awards**

#### **Academic Commendation**

2017, 2016 and 2015

I was commended for three consecutive years by Reed College for academic achievement.

ACM-International Collegiate Programming Contest -Pacific NW Regional Div1, 28th place

Nov.2016

Final score board for our local site at: http://acmicpc-pacnw.org/scoreboard/group3.html

ACM-International Collegiate Programming Contest -Pacific NW Regional Div2, 7th place Nov.2015 Final score board for our local site at: http://www.acmicpc-pacnw.org/ProblemSet/2015/group9.html

#### **Programming Related Work Experience**

Reed College Software Design Studio

#### **Intern of Software Engineering**

Feb.2016 - May.2017

We build softwares to serve Reed community. A major project is Lemur(a web data collector). Two fellow students and I built it for biology department. The app is a functional open-source web application built using Flask(a popular Python web-framework), JS, HTML/CSS and PostgreSQL. The app now is deployed on Reed College's server and used by biology department in their intro-level class for lab data collection. The app was maintained by me for a year and now maintained by CIS at Reed College. Github repo is at: github.com/reed-college/lemur

Reed College Library

System Assistant

Sep.2015 – Jan.2016

I wrote python scripts to help librarians to clean up system files.

# Work Experience

Reed College Math Department

## Math and Computer Science Tutor

Calculus, Analysis and Computer Fundamentals I.

Sep.2015 - May.2017

# Reed College International Student Services

#### **Interconnect Mentor**

Aug - Dec.2016

I helped new-incoming international students to be familiar with school/local culture by organizing monthly group events and conducting monthly one-on-one mentoring.

# Reed College Math Department

Math Grader

Sep.2015 - Jan.2016

Calculus.