

# Randy Zhou

<https://randyzhou.com/>

Permanent Address:      School Address (2019-2020):

<http://github.com/rzhou1999>

## EDUCATION

**Cornell University**, College of Arts and Sciences, Ithaca, NY

**Expected May 2021**

Bachelor of Arts, Computer Science (Major); CAPS, AAS, ECE (Minors)

Cumulative GPA: 3.81 (Dean's List: Spring 2018, Fall 2018, Spring 2019, Fall 2020)

### ***Relevant University Coursework:***

- Introduction to Computing Using Python (high school equivalent), OO Programming and Data Structures (high school equivalent), Discrete Structures, Data Structures & Functional Programming, Computer System Organization and Programming, Operating Systems, Computer Architecture, Computer Networks, Analysis of Algorithms, Distributed Computing Principles, Advanced Computer Architecture, Resilient Computer Systems, Multivariable Calculus for Engineers, Linear Algebra for Engineers

## RELEVANT EXPERIENCE

### **Systems Architecture and Infrastructure Lab**

**August 2019 - Present**

- Current undergraduate researcher at the SAIL group of the Computer Systems Laboratory at Cornell University working on scheduling techniques in datacenters with processing-in-memory (PIM)

### **Software Engineer Intern at Pearson K-12 Learning (Boston, MA)**

**June 2019 - August 2019**

- Worked with Pearson software engineers to decide new coding standards in new Angular and Express.js projects for an edtech platform with over 5.5 million annual users.
- Reduced micro-frontend, backend-for-frontend and microservice project setup time from several days to a matter of minutes by automating initial project scaffolding and adding seamless integration of commonly used libraries/services according to the above standards.
- Spearheaded adoption of the framework Ts.ED for new backend services by developing new features such as a general-purpose reporting system for usage statistics and system health hooked directly into the ts-debug-log logger

### **CS 3410 (Computer System Organization and Programming) Teaching Assistant**

**January 2019 - Present**

- Hold weekly office hours, grade exams/projects, answer student questions on Piazza, and co-lead a weekly lab section for one of the largest CS classes at Cornell (~200 students per semester).
- Run and maintain course infrastructure by deploying grading scripts and dependencies, setting up per-assignment staff server configurations, etc.
- Played an instrumental role in the ISA change from MIPS to RISC-V of SP19 in my first semester as a TA by helping develop new assignments/exam questions, writing staff solutions, and rewriting/porting major grading scripts for some of the largest and most complex projects in the course. Nominated by professor for a TA recognition award for key contributions during this ISA transition.

### **Cornell Hyperloop - Electrical/Software Subteam**

**September 2018 - May 2019**

- Worked with Arduino/BeagleBone Black sensors to measure temperature/pressure for safety systems
- Researched various Python libraries for base station GUI, used PyQtGraph to create visualizations of relevant sensor data, and tested pod-to-base station communication systems

## SPECIALIZED SKILLS

Object Oriented Programming; Data Structures and Algorithms; Functional Programming; Database Management/Usage; Systems Programming; Operating Systems; Computer Architecture Design, Verification and Analysis (PyMTL); Computer Networks; Analysis of Algorithms; Git/Version Control; Web Development; SDLC (Agile)

**Programming Languages/Technologies (By Proficiency):** Python, C, Assembly (RISC-V/MIPS), Java, JavaScript, TypeScript, OCaml, C#, Node.js, Angular, HTML/CSS, Haskell, Express.js

**Foreign Languages:** Chinese (advanced)