Randy Zhou

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EDUCATION

Cornell University, College of Arts and Sciences, Ithaca, NY **Expected May 2021**
Bachelor of Arts, Computer Science (Major); CAPS, East Asian Studies (Minors)
Cumulative GPA: 3.92, 5x Dean's List

Relevant University Coursework:
Discrete Math, 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, Database Systems, System Security

EXPERIENCE

CS 5414 (Distributed Computing Principles) Teaching Assistant **August 2020 - Present**

- Teaching assistant for CS5414, a graduate level distributed systems course at Cornell

Software Development Engineer Intern at Amazon (Seattle, WA) **June 2020 - August 2020**

- SDE intern under the devices organization (Kindle), where I implemented and deployed a reusable and configurable data transformation service for company-wide compliance with data privacy legislature using AWS technologies such as Lambda, Cloudformation and S3.
- Reduced transformation onboarding time to a matter of minutes by providing prebuilt and flexible support for arbitrary transformation of text fields, standardization of timestamp formats and mapping internal IDs to customer-readable values.

Systems Architecture and Infrastructure Lab **August 2019 - Present**

- Evaluated benchmark/application performance on heterogeneous datacenter architectures (processing-in-memory) by identifying memory hotspots using tools such as the Intel VTune Profiler and PAPI, and running simulations using the architectural simulator ZSim
- Currently investigating the effects of garbage collection on cloud microservice performance for use in a deployment debugging system based on unsupervised machine learning

Software Engineer Intern at Savvas (Boston, MA) **June 2019 - August 2019**

- Worked with Savvas software engineers to decide new coding standards in new Angular and Express.js projects for an edtech platform, Savvas Realize, 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 - May 2020**

- 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.
- Develop autograder scripts, staff solutions as well as original course material for students.
- Twice nominated by professor for a TA recognition award for key contributions to CS3410 course staff.

Programming Languages/Technologies (By Proficiency): Python, C, Assembly (RISCV/MIPS/x86), Java, JavaScript, TypeScript, OCaml, C#, Node.js, Angular, HTML/CSS, Haskell, Express.js

Foreign Languages: Chinese (advanced)