Ally Zhang

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SKILLS
- *Programming languages:* Java, JavaScript, Python, HTML, CSS, C, C#, SQL, Bash
- *Technologies:* Web development (React/Redux/Angular), Linux, database management, machine learning, CICD
- *Other:* French (B2), Adobe Photoshop, Agile methodology, graphic design

EDUCATION
Cornell University, College of Arts & Sciences, Ithaca, NY   *Expected Dec. 2020*
- Bachelor of Arts, Computer Science/Linguistics (double major)
- *GPA:* 4.11/4.3
- *Notable Coursework:* Object-Oriented Data Structures; Computer System Organization and Programming; Introduction to Database Systems; Computational Linguistics
- *Awards/Honors:* Dean's List, Phi Beta Kappa, Tanner Dean's Scholar, Ted Morris Prize

EMPLOYMENT
Software Engineering Intern, *Mastercard*   *Jun. 2020-Jul. 2020*
- Designed full-stack application feature allowing business clients to easily select dates for statistical analysis of sales
- Developed feature front-end and middleware in TypeScript, React, Redux
- Developed SQL and C# scripts to modify and service client database back-end
- Finished, tested and deployed to Jenkins pipeline in one month, cooperating with engineers and testers in Agile environment

Software Engineering Intern, *Fidelity Investments*   *May 2019-Aug. 2019*
- Developed web application for creating automated mailing lists in Angular, strengthening customer outreach
- Streamlined and automated internal news posts using Salesforce Marketing Cloud
- Helped migrate applications to cloud hosting through Amazon Web Services

Teaching Assistant, Computer System Organization and Programming, *Cornell University*   *Jan. 2019-Present*
- Tutor and evaluate upper-level undergraduates on assembly programming, computer architecture, and C
- Build and maintain Python auto-grading tools and C projects
- Guide students as a leader and mentor through interactive office hours, lab sections, and homework assignments

RESEARCH
Natural Language Processing Group, *Cornell Tech*   *Jan. 2019-May 2020*
- Worked with Dr. Yoav Artzi to evaluate machine-learning models on ability to process captions and image content
- Deployed and studied machine-learning algorithms including recurrent and convolutional neural networks
- Coauthored ACL 2019 conference paper: "A Corpus for Reasoning About Natural Language Grounded in Photographs"

Computational Linguistics Lab, *Cornell University*   *Aug. 2018-Dec. 2019*
- Worked with Dr. Mats Rooth to perform computational transcription and analysis of Portuguese phonology, benefiting digital archival of Portuguese
- Parsed and manipulate XML corpus data in Python, automating the process of transforming data for analysis
- Developed complex finite-state model to move transcribed text between formats

PROJECTS
Database System Development   *Sep. 2019-Dec. 2019*
- Created database management system in Java, including complex SQL interpreter
- Boosted data retrieval efficiency through query optimization and understanding of data structures

Classification of Spanish and English Phonetic Forms   *May 2018*
- Classified sound strings into English or Spanish using SVM machine-learning algorithm in Python scikit-learn
- Created Python syllabification and syllable-structure models for English and Spanish

LEADERSHIP
Publicity Officer, Association of Computer Science Undergraduates, *Cornell University*   *May 2018-Present*
- Arrange events, meetings and outreach through website and social media, reaching thousands of CS students
- Active leader and volunteer in Cornell's CS community through tech talks, interview prep, and other career tools

Technology Lead, Colleges Against Cancer, *Cornell University*   *May 2018-Dec. 2019*
- Organize graphic design, publicity and web design reaching entire Cornell campus
- Raise thousands of dollars in fundraising to benefit cancer survivors, treatment, and the annual Relay for Life