

Alice Ye Zhao

alicezhao@berkeley.edu

(650) 387-0312

<https://github.com/aliceyezhao>

Education

University of California, Berkeley

Aug. 2017 – Present

B.S. Electrical Engineering & Computer Science (EECS) with a Minor in Education

Relevant Coursework: Data Structures, Algorithms, Computer Architecture, Discrete Mathematics and Probability, Multivariable Calculus, Information Devices and Systems

Experience

Datadog, New York

Software Developer Intern

Summer 2019

Blueprint, Technology for Non-Profits <https://github.com/calblueprint/HomePointrCIC/>

Sep. 2018 – Present

Software Developer | Ruby on Rails, React

- Developing an intuitive full-stack web application for HomePointr CIC that streamlines the data exchange processes between up to 40,000 homeless individuals in Scotland and appropriate care services by storing, sorting and filtering form data
- Designing HomePointr's database schema while implementing model methods for user authentication and data serialization
- Constructing data stores through MobX to re-render React components efficiently by reducing the request load

Stanford University, Computer Science: Graphics Department

Jun. 2018 – Aug. 2018

Student Researcher | Python, Blender, C

- Designed a motion capture pipeline that uses OpenCV to detect markers on clothing in a 2D environment from multiple views
- Measured the Hausdorff Distance and Vertex Distance between clothing meshes by using scaling and centering techniques
- Reconstructed 3D body models from 2D images of poses with an open source end-to-end joint reconstruction method

Projects

Redis Data Structures https://github.com/aliceyezhao/redis_table | Java

- Distributed data structures with Redis that replaces in-memory operations with Redis commands using the Jedis library
- Retrieval and placement of data take constant time; data structures also include a local data structure that is stored in memory

Seam Carver Code available upon request | Java

- Removes pixels that are the most similar in color to adjacent pixels, outputting a compressed version of the original image

BearMaps Code available upon request | Java

- Web application that rasterizes map images and renders the shortest distance between points using A* path-finding

Code Lines Counter <https://github.com/aliceyezhao/counting-lines> | Python

- Uses recursion to find the length and size of a file or directory, including line count, blank line count, comment count

Random World Generator Code available upon request | Java

- Built a game that generates a pseudo-random world based on a random seed in Java complete with rooms and halls

Skills

Programming Languages

Python, Java, C, Scheme, Ruby, SQL

Web Technologies/Frameworks

React, JavaScript, Ruby on Rails, HTML/CSS

Hardware and Design

Basic Breadboarding, Blender, Photoshop, InDesign

Interests

Volunteering

- Teach an SAT prep class for low-income high school students
- Provide free vaccinations for underprivileged cats and dogs

Hobbies

- Member of Alpha Kappa Psi, Business Fraternity
- Writer for a student fashion blog: <https://berkeleygarb.com>
- Used to work at a boba shop (Teaspoon)