# **AKRITI SINGH**

## **EDUCATION**

University of California, Berkeley

## B.A. in Computer Science, Data Science

Relevant Courses:

Foundations/Principles of Data Science (DATA8, CS100) Data Structures & Algorithms (CS61B, CS170)

## **EXPERIENCE**

## Software Development Intern at Amazon, Alexa SmartHome

Designed and built a distributed web system to be used as an internal testing portal for developers, with integrations to AWS S3, simple queue service (SQS) for reliable job management, and DynamoDB for result storage
Used Spring MVC framework with Java to build a web interface where users can select tests to run and query the database for test run history, and built the web service to manage running the integration tests

## **Data Science Intern at Riptide**

• Used SQL and Python (Pandas, NumPy) to analyze business data to learn about user interaction with the messaging platform, and made visual representations of findings (using matplotlib, seaborn)

• Wrote Python scripts to parse pdf invoices, made a Slackbot to query MySQL database

## **Product Design Consultant at Berkeley Innovation**

Worked on a team to design the user experience, interface, and information architecture for local tech startups: SmartPhage (mobile health tracking application), and Lecida (web app for predictive maintenance for machinery):

- Conducted user interviews, did background research and competitive analysis, and synthesized insights
- Created low-fidelity (paper), mid-fidelity (Figma), and hi-fidelity (Sketch) prototypes with 20+ screens
- Conducted usability testing and reiterated based on common frustrations

## Teaching

January 2016 - present core CS & data science

September 2016 - December 2017

TA for Data8: Led a group of 30 students through weekly worksheets and labs testing core CS & data science fundamentals, helped develop practice questions, and explained concepts 1-on-1 and in small groups
 Lab teacher for CS Kickstart, a 1 week introductory program for freshmen: Taught CS concepts including recursion, sorting algorithms, and data structures, and led 35 students through a photo-manipulation project in Jython
 Teaching assistant for Intro to Illustrator & Photoshop class: Helped teach a class of 40 students to use softwares from Adobe Creative Cloud and advanced techniques for graphic design projects, including posters, logos, and flyers

## PROJECTS

## **Youtube Analytics**

#### *Python (scikit-learn, pandas),* May 2018 engagement with a video

Used a dataset of trending Youtube videos to create a model to predict user engagement with a video (comments/likes) from the uploader's descriptors (title, description, and tags)

## **Personalized Yelp**

## Ruby on Rails, HTML/CSS/Javascript, Illustrator, August 2017

Built a web app using Yelp & Google Places API that allows users to search for restaurants, view details, and upload their own reviews and photos. Allows users to organize their food photos by restaurant, and summarizes multiple reviews for each restaurant with detailed rankings by quality, service, quantity, etc.

## **Text Editor**

*Java,* March 2016

Built a text editor with scrolling, undo/redo, open/save, changing font size, word-wrapping, and clicking functionalities

## SKILLS

**Programming Languages:** Python, Java, SQL, HTML/CSS, Ruby, C, R\*, Javascript\* **Frameworks/Packages:** Ruby on Rails, Spring, NumPy, Pandas **Database/Software Tools:** MySql, IntelliJ, Xcode **Design Softwares:** Adobe Illustrator/Photoshop, Sketch, Figma August 2015 - May 2019

Computer Architecture & Operating Systems (CS61C, CS162) Databases & Internet Architecture (CS186, CS168\*) Artificial Intelligence & Machine Learning (CS188, CS189\*)

May - August 2018

January - May 2017