

SUMMARY

Graduate student with experience in web development from Intel Corporation. Designed an user interactive website using Python with Flask framework for back-end and JavaScript for front-end, to aid performance engineers visualize different workload performance results. Looking for full time opportunities in web development.

WORK EXPERIENCE

Software Intern (Intel Corporation):

(June 2019-December 2019)

- Implemented a web-based interactive dashboard with a user friendly interface. Extracted and processed the raw data from the database to render them as graphs and tables to ease analysis for performance engineers.
- Designed and built Rest-APIs using Flask to fetch huge amounts of data from a NoSQL database.
- Optimized the code to speed up the loading time for graphs by up to 2x. Initially the graphs took almost a minute to load more than a million data points.
- Identified a bottleneck during time conversion from UTC to seconds, and optimized it by reducing the function calls.

TECHNICAL SKILLS

- **Languages:** Python, JavaScript, HTML, CSS.
- **Databases:** MySQL, ElasticSearch, MongoDB.
- **Frameworks/Libraries:** React, AJAX, Flask, jQuery, Git.

PROJECTS

Sudoku visualizer using React | akshajm.github.io/Sudoku_solver/#/

(October 2020)

- Created a web-based Sudoku solver using React framework. Along with providing the results, the website also walks through the solution.
- Used Backtracking approach for solving the puzzle. Also incorporated a slider feature to adjust the speed of solving.

Comparison of sorting algorithms | github.com/akshajm/Comparison_of_Sorting_Algorithms

(April 2020)

- Created an user interactive website to compare the runtime complexity of various sorting algorithms like Bubble sort, Heap sort, Merge sort, Quick sort, etc. using technologies like Flask, Python, HTML, CSS and JavaScript.
- The website contains an online form wherein the user can either enter the array size to sort the randomly generated numbers or provide his own data in comma separated values format(csv).
- User must select the desired sorting algorithm and the final output will be a graph of time taken to sort the array v/s input size.
- The sorting algorithm is not limited to just one. Comparisons can be made between multiple algorithms and the user will see the graph for time taken to sort the data for these multiple algorithms.

Client Server app with socket programming | github.com/akshajm/Client_Server_application

(May 2020)

- Designed a multi-client server application using Python Programming. Each client can successfully connect and disconnect from the server with a unique username. All of this is managed with a GUI using TkInter interface.
- The project focuses on thread management and socket programming where the server will randomly select a client and then put the thread handling that particular client to sleep.
- The client could resume the operations only in the following two scenarios. First either the sleep timer for that thread is completed or the user clicks on the 'Wake up' button.

Recommender System

(December 2018)

- Created a recommender system that recommends movies to a user. Developed a web-based UI where the user can enter any movie name and the recommendation list will be displayed dynamically.
- Movies are recommended on item-based recommendation technique i.e based on the similarity of title for the two movies.
- Used Python for back-end development and Flask framework to create the website.

EDUCATION

M.S in Computer Science, University of Texas at Arlington

(August 2018-Dec 2020)

- Relevant coursework: Web Data Management, Software Testing, Distributed Systems, Data Mining, Data Analysis and Modelling Techniques, Machine Learning, Neural Networks, Advance Software Engineering.

B.E in Computer Engineering from Mumbai University, India

(August 2014-May 2018)

- Relevant coursework: Web technologies, Data Structures, Object oriented programming methodology, Software Engineering.