Raj Chhatbar

657-500-9851 | California rajc1729@outlook.com

github.com/rajc1729 linkedin.com/in/raj-chhatbar1729/ https://rajchhatbar.com/

Education

Master of Science, Computer Science, GPA: 3.7

August 2018 - May 2021

California State University, Fullerton

Relevant Courses: Web Backend, Operating System, Artificial Intelligence, Software Verification, and Validation

Post Graduate Diploma - Computer Science, GPA: 3.9

May 2017 - April 2018

GLS University

Relevant Courses: OOP, Database Management, Management Information System

Bachelor of Science, Physics and Computer Science, GPA: 3.3,

June 2014 - April 2017

St. Xavier's College, Ahmedabad

Relevant Courses: Data Structures, Analysis of Algorithms, Database Management System, Compilers, statistics, Linear algebra

Technical Skills

Language: Python, Typescript, Go, Java, C++ Cloud: AWS (EC2, S3, Elasticsearch service, Sagemaker), GCP, Firebase, Kubernetes Databases: PostgreSQL, MySQL, MongoDB, Firebase (Cloud Firestore and Realtime), Redis, Dynamo-DB Web Tech: Django, React-JS, Redux, Express-JS, Next.js, Apollo Client, SASS, Material-UI Big Data: Apache Spark, PySpark Libraries: Scikit-learn, NumPy, PyTorch, TensorFlow Architecture: REST, GraphQL Distributed system: RabbitMQ, Kafka

Work Experience

CollabCafe, Inc.

Full-stack software engineering Intern

February 2021 – May 2021

- Worked on to write 35 reusable components using Next.js, Typescript, and SASS
- Build a video chat application using Kubernetes cluster and opensource WebRTC Jits framework to serve 1000 users

California state university Fullerton

Graduate Research Assistant

January 2020 - July 2020

- Conducted research to understand impacts on cancer, based on gender, ethnicity and geographic region
- Analyzed the subset of data using statistical methods such as multi-comparisons, conducting meta-analysis with prior studies related to mortality and morbidity for a different type of cancer
- Identified importance of various features through domain expert and removed irrelevant features

Techmicra IT solutions

Software Developer Intern

January 2018 - June 2018

- Created a unit testing framework on all backend modules using Python which reduced 20% bugs in the overall system
- Designed and optimized SQL queries and stored procedures for faster execution; retrieval of data to the database
- Managed and co-founded the committee to organize various events among employees

Projects

Virtual memory manager in operating system

C++, Singleton design, OOP, Page replacement algorithm

• Implemented a virtual memory management system, included support for paging, Virtual Memory and page replacement to and from the backing store by utilizing LRU and FIFO page replacement algorithm

Text search using Docker and Elastic Search

NodeJS, Docker, Elastic search, ReactJS, Nginx

 Populated Elasticsearch with 100 books (230,000 paragraphs) to prepare a search API by leveraging Nginx and NodeJS backend client along with ReactJS as frontend client

Real-Time Taxi App with Django Channels and React

Django-Channels, Redis, PY-test, ReactJS, Nginx

• Used asynchronous Django-channels to create WebSocket hooked with React-JS to visualize the current location using Google Maps. Leveraged Cypress for creating end-to-end testing.

Reddit Clone

Django, Bootstrap

• This project closely resembles the functionality of Reddit, where I have used django.contrib.auth modules to authenticate/signup/logout users and users model to handle users' authentication data

Blogs

- How to Setup AWS S3 with Django REST like a Beast, I have written a tutorial blog where I have explained setting S3 Bucket with Django for serving static files
- Create a Production Ready Infinite Scrolling in React-Js using Power of Debounce, Throttle, and Hooks from scratch, here I have written a tutorial blog where I have implemented infinite scrolling by making and using a custom Hook.