

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

Expected Graduation: May 2021

California State University, Fullerton

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

Bachelor of Science, Physics and Computer Science, GPA: 3.65,

Apr-2018

St. Xavier's College, Ahmedabad and GLS University

Relevant Courses: OOP, 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, Celery, React-JS, Redux, Express-JS, Next.js, Apollo Client, SASS **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 - Present

- Implementing 35 reusable components using Next.js, Typescript, and 30 REST APIs using Django REST Framework
- Expedited APIs response time by utilizing asynchronous task queue using Celery for running background task
- Building a video chat application using Kubernetes cluster and opensource WebRTC Jits framework to serve 1000 users

California State University, Fullerton

Student Assistant at University Data Center

Aug 2020 - Present

- Configured Nginx to setup reverse proxy and using telnet, grep Linux tools for testing, debugging, and troubleshooting
- Reduced deployment time by developing bash scripts to automate build and deployment on Ubuntu servers

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

Technicra 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

Volunteer

Finary.io

Software Developer Intern

May 2020 - July 2020

- Collaborated with MIT and Harvard students to develop an MVP for a fintech startup, currently in the testing phase
- Developed REST API using express.js and deployed it over Firebase cloud function to reduce operation cost by 30%

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 to prepare a search API by leveraging Nginx and NodeJS along with ReactJS

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

Blogs

- **How to Setup AWS S3 with Django REST like a Beast**, here I have written a tutorial blog where I have explained setting S3 Bucket along with creating REST APIs using 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