

Rahil Parikh

✉ rahilparikh99@gmail.com | +1 (469)793-3731 | [in/rahilparikh007](https://www.linkedin.com/in/rahilparikh007) | [GitHub/Rahil-Parikh](https://github.com/Rahil-Parikh) | <https://me.thedecentralhub.com>

PROFESSIONAL EXPERIENCE

Software Engineer - C.B.R.E., Richardson, Texas

Jun. 2023 - May 2024

- Collaborated with cross-functional teams to enhance REST APIs, conduct rigorous unit testing, upgrade Spring Boot applications, and mitigate critical vulnerabilities driving continuous improvement across Valuation & Advisory Services at CBRE
- Developed lambda to trigger AWS ElasticSearch snapshots for incremental restoration to AWS OpenSearch
- Executed Disaster Recovery strategies for RTO of 4 hrs & RPO of 1 hr using Terraform with cross-region replication for secrets & S3 buckets, as well as ensuring resilience and scalability for ECS clusters and OpenSearch.
- Spearheaded automation initiatives in branch management, reducing average execution time by 90% in pre-release activities for branch creation and configurations, & by 95% in post-release branch merging activity
- Mastered Infrastructure as Code with Terraform, AWS services (S3, IAM, Opensearch, ECS, SQS, Cloudwatch), and Azure DevOps services (pipelines, repos and artifacts), to streamline & carry out seamless UAT deployments & production releases
- Revamped legacy build & release pipelines to enhance resource efficiency, gather key metrics for business insight, upgrade monitoring capabilities with Datadog, and strengthen security through Prisma Cloud integration

Software Developer Engineer - Ministry of Forest, Govt. of Maharashtra

Dec 2020 - May 2022

- Designed, developed, and deployed a secure mobile & web-based tree census management system
- Integrated Jenkins CI/CD with dockerization, enabling seamless rapid deployment & patching for enhanced efficiency & agility
- Revitalized outdated manual data collection methods by implementing an employee authorized QR code-based tagging and surveying mechanism for digital tree census, streamlining data collection processes and improving accuracy

Associate Software Engineer, Intern - C.B.R.E South Asia Pvt. Lmt., Gurugram

Jun. 2021 - Sep. 2021

- Created APIs and unit tests with 85% code coverage for Java Spring Boot app and Flask based web app
- Led a strategic overhaul of development processes by meticulously selecting tools for test automation, coverage reporting, linting, and code formatting, optimizing efficiency and ensuring code quality across Python-based microservice applications.

Software Developer Intern - North Eastern Space Applications Centre, Meghalaya

Mar. 2021 - May 2021

- Played a key role in 'Automation of Swarm of Drones & Image Stitching' project, leading payload testing & drone assembly
- Engineered a master-slave system architecture for aerial drone mapping and formulated a program to generate and sequence coordinates for drone survey, enabling real-time image transfer to the ground station and enhancing data collection efficiency

EDUCATION

Master of Computer Science

Arizona State University, Tempe

May 2024

CGPA: 3.67/4; Relevant coursework : Data Processing at Scale, Advanced OS, Combinatorial Algorithms, DBMS Implementation

B.Tech in Computer Engineering

K.J. Somaiya College of Engineering, Vidyavihar, Mumbai

May 2022

CGPA:8.66/10; Relevant coursework : Data Structures, Microservices and DevOps, DBMS, Operating Systems, Cloud computing, OOPS

PROJECTS

RISCV xv6 Advanced Operating System (C, Assembly)

Apr. 2023

- Created custom bootloader for xv6 to initialize hardware and load OS kernel, built self-threads with policy based scheduling
- Implemented memory management, virtualization, synchronization, scheduling, drivers in xv6 operating system
- Designed on-demand paging with page fault handler to load pages dynamically and swap when out of memory

Ecommerce Application (Java, Dart, Javascript)

Nov. 2022

- Developed a single-admin-seller multi-user, authenticated Reactjs based Web app and Flutter based Mobile app
- Incorporated e-commerce modules such as ordering, shopping cart, and inventory management with a Firebase database
- Remodeled the system architecture, following MVC pattern & cookie based authentication with containerized Postgres and Spring Boot JPA for the ecommerce application hosted on AWS EC2 instance for another freelancing client
- Scripted CI/CD pipelines with Jenkins for using container registry and version control

End-To-End-Encrypted Chat Application (Python)

Apr. 2021

- Collaborated in a team of 3 to build an end-to-end encrypted secured text and media messaging mobile application
- Authored and published a paper in *Inventive Systems and Control*, vol 436. Springer, Singapore

TECHNICAL SKILLS

- Programming Languages: Java, Python, C, C++, Go / Golang, C#, Javascript, SQL, Scala, Dart, Bash, Powershell, HTML5, CSS
- Tools and OS: Java Spring Boot, Junit, Mockito, Node JS, Django, pytest, Apache Spark, React.js, Angular, AWS cli, Git, Linux
- SQL/NoSQL Databases : MySQL, PostgreSQL, MongoDB, Neo4j , Redis, Firebase Realtime DB
- DevOps: Terraform, Azure DevOps (Pipelines, Repos, Artifacts), Jenkins, Docker, Kubernetes, Maven, Gradle, Git ,Grafana
- Cloud Computing : AWS - EC2, ECS, Lambda, SQS, SNS, Route 53, S3 , VPC ,OpenSearch, IAM roles policies, Cloudwatch

EXTRA CURRICULAR ACTIVITIES

CBRE Innovate 2023 Hackathon: Developed & presented a solution for document classification & its integration to existing system

CS Tutor, Ira A. Fulton Schools of Engineering, ASU : Tutoring support to 120+ undergrads for OOPS, DS, Algo, COA and Soft Eng

Lead Mentor, SMLRA, AI community, KJSCE: Organized seminars, hackathons, workshops, & tutored on ML, DL, & NLP in 101 series