

LEAD SOFTWARE ENGINEER

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Technical Experience & Projects - 7 YOE ____

Cuemath

LEAD SOFTWARE ENGINEER Apr 2023 - Present

• Led development of a teacher licensing framework that increased trial acceptance rates by **25%**, automating the certification process & improving the trial allotment for teachers through 3rd-party assessment integration and an asynchronous workflow system.

- Architected and implemented an internal analytics streaming framework processing millions of entries daily, reducing data processing
 time by 60%. Leveraged Go router to efficiently stream data to data warehouse, implementing automated ETL pipelines to ensure
 data quality integrity and streamlined reporting.
- Led a team of four to develop an event-driven referral system & incentive engine that increased qualified referrals from 3% to 10% of total lead volume, generating \$200K+ in additional revenue.

SOFTWARE ENGINEER II Jan 2020 - Mar 2023

- Developed an auto-renewal system, enabling seamless plan renewals, dynamic pricing offers, and flexible upgrades or downgrades
 based on user preferences. This solution reduced manual intervention and increased auto renewal coverage to 86% of all renewals
 and upgrades in the system, improving retention rates.
- Implemented an end-to-end Al-powered achievement certification system. Integrated with our React based client to capture user accomplishments. Leveraged serverless image pool generation to dynamically create personalized certificates based on configurable criteria. Automated the certification workflow, enhancing student satisfaction and retention through tailored digital achievements.
- Designed and implemented a dynamic supply & demand allotment system with nearly real-time accuracy, incorporating caching layers to optimize system efficiency.
- Developed an Internal Authentication SDK with advanced access control and claims management features, ensuring secure access to internal systems and resources.
- Optimized an ordered distributed messaging queue (SQS) with a bottleneck consumer, implementing backoff and retry strategies that improved throughput by **30%** and reduced message processing failures by **25%** at the peak loads.

SOFTWARE ENGINEER

Jun 2018 - Dec 2019

- Developed a robust framework that efficiently generates and serves thousands of interconnected web pages from a backend service sourced by SQL (hierarchy meta-data) & media storage, leveraging Server-Side Rendering with Next.js to enhance SEO performance and scalability, resulting in significant improvements in overall search engine optimization (SEO), performance, and traffic flow.
- Improved the build process for a large-scale Next.js project, reducing build time from an **hour+ to 20 min** through optimizations in bundling, resource handling, performance tuning and other critical improvements. Addressed both DevOps and core build processes, enhancing deployment speed in both production and staging environments.
- Built a Feedback engine to seamlessly accept, persist, and process feedback from multiple clients, enhancing the organization's feedback management process.

SOFTWARE DEVELOPER INTERN

Jan-July,2017

- Contributed to the core architecture revamp of Cuemath, utilizing Django as the web framework & Postgres as the database, leading to enhanced system performance and scalability.
- Implemented API server connection using DRF(Django REST Framework) for communicating with application client.
- Developed an automated booking system with backend in Django and frontend using HTML and javascript.
- Created an Android application to track progress and integrated analytics, enabling the creation of personalized journeys for clients.

Skill Set ___

Programming Languages Python, Java, NodeJS, Javascript, Go

Frameworks & Services Flask, Spring, NextJs, GCP, ReactJS, Kafka, AWS - SNS, S3, Kinesis, Lambda Familiar Technologies Postgres, DynamoDB, MongoDB, ElasticSearch, Redis, Docker, Kubernetes

Education

PEC University of Technology

Chandigarh, India

B.E IN COMPUTER SCIENCE AND ENGINEERING

2014-2018

ABHISHEK KASANA