

Sravan Kumar Muske

Principal Engineer

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WORK EXPERIENCE

Principal Engineer

Dec 2024 - Present

ABS-CBN

Bangalore, India (Remote)

- Leading the migration of a large-scale OTT platform from a vendor-managed solution to an in-house microservices architecture, defining the technical roadmap across backend services, frontend applications, playback, analytics, and platform infrastructure.
- Architected highly scalable distributed systems serving 5M+ daily active users with a strong focus on reliability, low latency, resilience, and cloud-native design.
- Led infrastructure optimization initiatives across compute, storage, search, and platform services, reducing cloud infrastructure costs by 30% and delivering recurring savings of over \$6,000 per month.
- Own the end-to-end Advertising platform architecture, including SSAI integration, ad decisioning, playback workflows, targeting, analytics, and monetization services.
- Designed and implemented personalized content discovery systems including Trending, Top 10, Continue Watching, and Because You Watched using behavioral analytics, ranking algorithms, and relevance optimization.
- Architected a near real-time Continue Watching platform (~3-second synchronization) using Kafka and MongoDB, enabling seamless cross-device viewing experiences.
- Designed a distributed caching platform with event-driven invalidation, intelligent cache hierarchy, and selective cache purging, significantly improving API latency while reducing database load.
- Implemented an Image Policy Manager for dynamic image transformation, optimization, and CDN caching, improving page performance while reducing bandwidth consumption.
- Led SEO initiatives including automated XML sitemap generation, metadata optimization, and search engine indexing strategies to improve organic content discoverability.
- Established platform-wide observability through metrics, structured logging, dashboards, and alerting for playback, advertising, and backend services, improving operational visibility and reducing incident resolution time.

Principal Engineer

Jun 2024 - Dec 2024

Circles

India

- Designed and deployed a real-time coupon dispatch system integrated with mobile pack purchases.
- Ensured low-latency fulfillment and high reliability, improving conversion rates and customer satisfaction.
- Built scalable backend workflows to handle high transaction throughput with strong consistency guarantees.

Senior Architect

Apr 2021 - Jun 2024

ZEE5

India

- Led the end-to-end development of a News platform from scratch, defining architecture across backend, frontend, and data systems.
- Owned OTT platform services for Roku and Android TV, driving API design, performance optimization, and cross-team delivery.
- Architected a high-performance Golang service reducing entitlement load by 60% and infrastructure cost by 40%.
- Re-architected catalog ingestion pipelines using Node.js, significantly improving throughput and operational efficiency.

- Replaced a third-party video player with an open-source and custom playback stack, reducing costs and improving playback performance.
- Enabled data-driven decision making across Ads, Playback, and Engagement through analytics pipelines.
- Improved content discovery and search relevance through better metadata structuring and ranking strategies.

Senior Software Engineer / SDE II

Dec 2016 - Mar 2021

Hotstar

India

- Played a key role in launching the Hotstar Roku app for US and Canada market expansion.
- Migrated Android player to ExoPlayer, enabling extensibility for ads, analytics, and playback optimizations.
- Built server-side ad stitching (SSAI) solutions for VOD content using custom player extensions.
- Designed live ad tracking algorithms for HLS streams, solving real-time ad detection and tracking challenges.
- Developed a robust download manager supporting DRM, multi-audio, and subtitles.
- Improved playback success rate from 95% to 99.5% using detailed analytics and structured error classification.
- Boosted download speeds by 4x-10x through connection optimization and retry strategies.
- Implemented advanced playback features including track selection, caching, and Chromecast integration.

SDE

Jan 2015 - Dec 2016

FreeCharge

India

- Built the Chat & Pay feature enabling peer-to-peer transactions within a messaging interface.
- Developed an OTP auto-read SDK improving payment success rates and reducing checkout friction.

SDE

Jun 2013 - Jan 2015

Samsung

India

- Developed lightweight applications for Galaxy devices with a focus on performance and resource efficiency.
- Maintained and enhanced legacy applications across multiple Samsung device ecosystems.

EDUCATION

Computer Science & Engineering

Aug 2009 - May 2013

IIT (ISM) Dhanbad

Dhanbad, India

HUSTLES

3xpense [View](#)

A personal finance and expense tracking application designed to help users manage their spending habits effectively.

SKILLS

System Design

Microservices

Video Tech (HLS/DASH)

Go (Golang)

Node.js

React / Next.js

Android / TV Development

AWS / Cloud Architecture

Kafka