LAKSHAN KUMAR JK

Senior Full Stack Engineer | Technical Lead | Scalable Systems Architect

PROFILE

Dynamic Full Stack Engineering Leader with 5+ years across FinTech, EdTech, and OTT streaming. At **Neokred**, led a 9-engineer team building scalable FinTech microservices (Node.js, Next.js, PostgreSQL) for 10,000+ concurrent users; at **BYJU'S**, engineered secure authentication and user-management features serving 50M+ accounts. As an independent freelance engineer, architected a complete OTT streaming platform (HLS, Multi-DRM, CDN) across web, mobile, and TV. Expert in system design, distributed microservices, REST APIs, and database optimization, with a track record of turning technical vision into tangible business outcomes.

PROFESSIONAL EXPERIENCE

NEOKRED TECHNOLOGIES | Bengaluru, Karnataka

Dec 2022 - Apr 2026

FinTech Domain

Software Development Engineer III (SDE-3) & Team Lead

- Led and grew an engineering team from 4 to 9 members, achieving 100% on-time delivery across 3 enterprise applications with zero critical production incidents.
- Architected a scalable microservices ecosystem using Next.js 14, Fastify, and TypeScript, handling 10,000+ concurrent users with sub-200ms response times.
- Engineered robust RESTful APIs with advanced caching strategies, reducing database load by 60% and improving API response times by 45%.
- Pioneered containerization using Docker and Kubernetes, achieving 99.9% uptime and seamless horizontal scaling.
- Optimized PostgreSQL performance through advanced indexing, query optimization, and connection pooling, resulting in 3x faster query execution.
- Implemented comprehensive CI/CD pipelines with unit and integration testing, reducing deployment time from 4 hours to 30 minutes with zero-downtime deployments.
- Mentored junior developers through code reviews, pair programming, and technical workshops, improving team velocity by 35%.

BYJU'S | Bengaluru, Karnataka

Oct 2020 - Nov 2022

User Management System - EdTech Platform

Software Engineer (Oct 2021 - Nov 2022) · Associate SE (Jan 2021 - Oct 2021) · Engineering Trainee (Oct 2020 - Jan 2021)

- Developed high-impact features for a user management system handling 50+ million user accounts across India.
- Implemented secure authentication and authorization using JWT, OAuth 2.0, and role-based access control.
- Optimized user data retrieval and search, reducing query response time by 40% through efficient indexing.
- Built admin dashboards and user analytics modules using React.js and Redux for real-time monitoring.
- Accelerated through 3 promotions in 2 years, demonstrating exceptional technical growth and business impact.

FREELANCE PROJECT

GRAVITORIX (FREELANCE) | Tuticorin, Tamil Nadu

OTT & Social Media Platform (YourBackers)

- Architected and shipped a multi-tenant **OTT streaming platform** with an adaptive bitrate (ABR) HLS quality ladder, multi-DRM protection (Pallycon Widevine, verified end-to-end on web and Android), and CloudFront CDN signed-URL delivery over private S3.
- Built a full media pipeline supporting multi-language audio dubs and SRT→VTT subtitles via proxy-master injection — no re-transcoding — plus movies/series with season & episode-level watch progress.
- Delivered a companion **social platform**: short-form video (Clips), 2-level threaded comments, an app-wide @mention system, follows, and in-app WebRTC calling with FCM push wake-up.
- Engineered cross-platform clients (React Native, with a Flutter rewrite), a TV app with "sign-in-on-your-phone" device-grant pairing, and a web client portal.
- Integrated payment gateways (PayU + Razorpay) for subscriptions and monetization, a referral earnings & downline engine, and a unified analytics dashboard (engagement, retention, content performance, active users).

CONTACT

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Bengaluru, Karnataka, India

EDUCATION

Bachelor of Technology (B.Tech)
Computer Science Engineering
Kalasalingam University
2016 - 2020

TECHNICAL PROFICIENCIES

Languages: JavaScript (ES6+), TypeScript, SQL

Frontend: React.js, Next.js 14, React Native, Flutter, Redux, TailwindCSS

Backend: Node.js, Express.js, Fastify, GraphQL, JWT/OAuth

Media & RTC: HLS, Multi-DRM (Widevine), WebRTC, FCM, CloudFront/S3

Databases: PostgreSQL, MongoDB, Redis

DevOps: Docker, Kubernetes, Jenkins, GitHub Actions, AWS

Architecture: System Design, Microservices, Distributed Systems, Event-Driven, RESTful APIs, WebSockets

Integrations: Payment Gateways (PayU, Razorpay), CDN, Adaptive Bitrate Streaming

Methodologies: Agile/Scrum, TDD, DDD

KEY ACHIEVEMENTS & IMPACT

- **Performance:** Reduced application load time by 70% via SSR, CDN integration, and progressive rendering.
- **Technical Innovation:** Cut technical debt by 50% while raising code coverage to 85% through modern tooling, unit, and integration testing.
- **Cost Optimization:** Reduced infrastructure costs by 30% through efficient resource utilization and container orchestration.