

LAL CHAND

FULL STACK ARCHITECT | AI ENGINEER | MOBILE & DESKTOP SPECIALIST

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TECHNICAL ARSENAL

Frontend & UI:	React 19, Next.js 15, Angular, Tailwind, Elementor (WordPress), Framer Motion
Backend & API:	Node.js, NestJS, GraphQL, REST, FlatBuffers (Binary Opt), gRPC
Database:	MongoDB, MySQL, PostgreSQL, Redis, Vector DB (Pinecone/Milvus)
Mobile (Android):	Jetpack Compose, Kotlin, MVVM, Room, Hilt, Biometric Auth, ML Kit
AI & Automation:	OpenAI, LangChain, RAG, N8N, Python, Puppeteer/Selenium (Scraping)
Desktop & Media:	Electron (VPN/Music Apps), FFmpeg (Video/Audio), WebRTC (Screen Rec)
DevOps & Tools:	Docker, AWS, CI/CD, Cron Jobs, Linux Scripts, Git, Nginx

PROFESSIONAL EXPERIENCE

Senior Full Stack & AI Engineer, Tech Innovators

2024 — Present

- AI & Video Systems:** Built a web-based video editor and screen recorder using WebRTC and FFmpeg (WASM). Integrated AI-driven search capabilities using Vector DBs.
- High-Performance Backend:** Optimized Node.js REST APIs using FlatBuffers for binary data transfer, reducing payload size by 60% and improving response speed.
- Automation:** Deployed server-side cron jobs and N8N workflows for automated report generation and database maintenance.

Full Stack Developer, Creative Solutions

2022 — 2024

- Desktop Applications:** Developed cross-platform desktop apps (VPN Client & Music Player) using Electron and React. Implemented low-level system hooks for VPN tunneling.
- Chrome Extensions:** Built complex Manifest V3 extensions for browser automation and ad-blocking/optimization, utilized by 10k+ users.
- Scraping Infrastructure:** Engineered a distributed scraping network using Puppeteer/Playwright to aggregate data for admin dashboards.

Android & Web Developer, Freelance/Contract

2020 — 2022

- Mobile Development:** Shipped native Android apps (Jetpack Compose) featuring Biometric Login (Fingerprint/FaceID) and offline-first Room databases.
- CMS & Admin Panels:** Developed custom Admin Portals (MERN Stack) and high-performance WordPress sites with custom Elementor widgets.

KEY PROJECTS

AI-Powered Video Editor & Screen Recorder | React, FFmpeg (WASM), WebRTC, Node.js

Browser-based tool for recording screen/cam, trimming video, and auto-generating subtitles using Whisper AI.

Secure Desktop VPN & Music Streamer | Electron, Node.js, OpenVPN, React

A dual-purpose desktop app featuring secure tunneling (VPN) and a high-fidelity audio player with local caching.

Intelligent Search & Chatbot Portal | Next.js, LangChain, Elasticsearch, Vector DB

Enterprise RAG search engine capable of indexing PDFs/Docs and answering queries via a custom AI chatbot.

Android Fintech App (Biometric Secured) | Kotlin, Jetpack Compose, BiometricAPI

Finance manager with bank-grade security, fingerprint login, and real-time expense tracking graphs.

Automated Ad-Tech Chrome Extension | JavaScript, Manifest V3, Service Workers

Lightweight extension for blocking trackers and optimizing ad delivery speeds, improving page load by 3x.

High-Scale Scraping & Data Admin Panel | Puppeteer, N8N, MongoDB, React Admin

Automated pipeline scraping 50+ sites daily, feeding a centralized React admin dashboard for analytics.

EDUCATION

B.Tech Computer Science, [University Name]

2021

Specialized in Distributed Systems, Binary Optimization, and AI Architectures.