

20 LPA Full Stack + AI Roadmap (6 Months)

Frontend:

- TypeScript (advanced concepts)
- React JS (Hooks, performance optimization, architecture)
- Next.js (SSR, API routes, production patterns)
- Tailwind CSS (responsive UI design)
- React Query / TanStack Query
- Advanced React Native (performance tuning, offline sync, architecture)

Backend:

- Node.js (core concepts, async patterns, event loop)
- Express.js / Fastify
- REST API design best practices
- Authentication (JWT, OAuth, role-based access)
- Input validation (Zod / Joi)
- Error handling & logging
- WebSockets (real-time features)
- Clean architecture & folder structuring

Database:

- PostgreSQL (primary focus)
- SQL queries, joins, indexing, transactions
- Prisma ORM
- Redis (caching basics)
- MongoDB (basic knowledge)

AI Integration:

- Ollama (local LLM setup)
- OpenAI API usage
- Prompt engineering
- Chat completion & streaming responses
- Embeddings
- Vector databases (Supabase / Pinecone basics)
- RAG (Retrieval Augmented Generation)
- Cost optimization & token understanding

Additional Tools & DevOps:

- Docker (containerization)
- Git & GitHub (professional workflows)
- GitHub Actions (CI/CD basics)
- Deployment (Vercel, Render, Railway)
- Cloud basics (AWS EC2, S3 concepts)
- Environment configuration management

System Design & Interview Prep:

- Scalability concepts
- Caching strategies
- Background jobs & queues
- Rate limiting
- API versioning
- High-level system design for full stack apps