

# Swayam Purwar

Performance-Focused Full-Stack Engineer | Real-Time Systems & Scalable Architectures

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GitHub : [github.com/SwayamPurwar](https://github.com/SwayamPurwar) | Portfolio: [swayampurwar.vercel.app](https://swayampurwar.vercel.app) | LinkedIn:

[www.linkedin.com/in/swayam-purwar](https://www.linkedin.com/in/swayam-purwar)

## PROFESSIONAL SUMMARY

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Full-Stack Engineer specializing in low-latency, event-driven applications using the MERN stack. Experienced in architecting scalable backend systems, optimizing React rendering cycles, and improving real-time performance under concurrent load. Focused on delivering production-grade systems with measurable impact and clean modular architecture.

## CORE COMPETENCIES

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**Frontend:** React.js, JavaScript (ES6+), Memoization, Code Splitting, Performance Profiling, GSAP

**Backend:** Node.js, Express.js, REST APIs, WebSockets, Event-Driven Architecture, Middleware Optimization

**Database:** MongoDB (Schema Design, Indexing), SQL, Query Optimization

**Security:** JWT Authentication, Protected Routes, Secure API Middleware

**Deployment:** Git, GitHub, Vercel, Environment Configuration, Production Debugging

## PROJECTS

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### Kite Trading Application – Real-Time FinTech System

Tech: React, Node.js, WebSockets, MongoDB

- Built event-driven stock dashboard handling 1,000+ concurrent simulated updates.
- Designed modular backend architecture for high-frequency data streams.
- Reduced React re-renders by 35% via memoization and optimized state flow.
- Improved response latency from 1.2s to ~400ms using batching and data diffing.
- Structured APIs for future horizontal scaling.

### Instagram Full-Stack Application

Tech: React, Node.js, Express, MongoDB

- Implemented JWT-based authentication and protected routing.

- Designed indexed MongoDB schema for scalable user-post interactions.
- Built cursor-based pagination and lazy loading for feed scalability.
- Reduced API payload size by 28% using optimized projections.

## **Apple Music UI Redesign**

Tech: React, GSAP

- Developed high-performance animated UI with synchronized timelines.
- Reduced animation frame drops under heavy DOM load.
- Improved Lighthouse score from 72 to 95+ via asset optimization.

## **EXPERIENCE**

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### **Software Development Engineer Intern – Bluestock Fintech**

- Developed backend APIs for financial analytics systems.
- Improved API response time by 22% through query and middleware optimization.
- Assisted in debugging production systems and structured error handling.

### **Creative Developer (Freelance)**

- Delivered interactive portfolio and brand websites end-to-end.
- Improved Lighthouse scores to 90+ via asset compression and lazy loading.
- Managed full lifecycle from requirements to deployment.

## **EDUCATION**

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Bachelor of Computer Applications (BCA – Core)  
LNCT University, Bhopal | Expected 2026