

# Arya Sharma

+91 98170 37928 | ashgrtz2003@gmail.com | [LinkedIn](#) | [GitHub](#) | [Twitter](#) | [Portfolio](#)

## Summary

**Full-Stack Software Developer** specializing in **React, Node.js, and SQL/NoSQL systems**. Experienced in building production-ready applications, AI-integrated **RAG solutions**, high-performance user interfaces with a strong foundation in **DSA** and **system design**.

## Technical Skills

- **Languages:** JavaScript (ES6+), TypeScript, Java, SQL, HTML5, CSS3
- **Frontend:** React.js, Redux Toolkit, Tailwind CSS, Three.js (R3F), GSAP, Framer Motion, Lenis, Vite
- **Backend:** Node.js, Express.js, RESTful APIs, JWT Auth, RBAC (Role-Based Access Control)
- **AI Engineering:** LLM Integration (Gemini/OpenAI), RAG Architecture, Prompt Engineering, Vector Embeddings
- **Databases:** MongoDB (Atlas), PostgreSQL, MySQL
- **DevOps & Tools:** Git/GitHub, Docker, Vercel, Postman, Render, Payment Gateways (Razorpay/Stripe)
- **Core Fundamentals:** Data Structures & Algorithms (DSA), OOP, DBMS, OS, Computer Networks, Computer Architecture

## Achievements & Certificates

- Active participant in 30+ coding contests across LeetCode & CodeChef with consistent upsolving [[CodeChef 3★](#)] | [[LeetCode](#)]
- **Rating 1600+**
- **700+ DSA** problems solved across LeetCode and CodeChef .
- Software Engineering [[HKUST](#)], Agile Project Management [[Google](#)], Coding Interview Prep [[Meta](#)]
- **J.P. Morgan Chase** Software Engineering Virtual Experience — [[Forage](#)]

## Projects

### Astra | Hardware-Accelerated 3D WebGL Ecosystem [Live Link](#) | [Github](#) | Youtube Presentation

June 2024 - Aug 2024

Tech Stack: React, Three.js (R3F), Chatbase, Framer Motion, Tailwind

- **Spearheaded** a 3D immersive environment using React Three Fiber and math-based damping algorithms (maath/easing), maintaining a fluid 60 FPS interactive experience across devices.
- **Boosted Mobile Performance** from **41** to **56+** and Desktop to **86+** by implementing Draco Mesh Compression (70% asset reduction) and React Suspense for asynchronous asset orchestration.
- **Reduced Total Blocking** Time by utilizing delayed hydration and async execution for **third-party AI scripts**, ensuring sub-second Largest Contentful Paint (LCP).
- **Developed** a custom high-performance particle engine using **HTML5 Canvas API** and integrated hardware-accelerated scroll-bound animations via **GSAP & Lenis**.

### AshFit | Full-Stack E-commerce Platform [Live link](#) | [Github](#) | Youtube Presentation

Nov 2024 - Feb 2025

Tech Stack: React.js, Node.js, Express.js, SQL, Tailwind CSS, REST API, Postman, RBAC

- **Architected** a decoupled **full-stack ecosystem** using Node.js and Aiven Cloud MySQL, orchestrating 25+ RESTful endpoints with a verified **Time-to-First-Byte (TTFB)** latency of **<200ms (averaging 160ms)**.
- **Hardened** application security by implementing **JWT-based authentication** and custom **Role-Based Access Control (RBAC) middleware**, successfully protecting administrative routes and sensitive user data from unauthorized access.
- **Spearheaded** the development of an automated Admin Inventory Dashboard with full **CRUD functionality**, reducing manual product management overhead by **~50%** for **20+ live** performance-apparel listings.
- **Orchestrated** a robust transaction pipeline by designing relational SQL schemas for persistent cart management and multi-step checkout, validating **100% of workflows** via **Postman automated testing** to ensure zero data loss.
- **Streamlined** a production-grade CI/CD pipeline using **GitHub, Render, and Vercel**, enabling automated deployments and ensuring high availability of the storefront and backend API.

### AshStar | AI-Powered Gamified SaaS Platform [Live link](#) | [Github](#) | Youtube Presentation

Sept 2025 – Present

Tech Stack: React.js, Node.js, Express, MongoDB, GSAP, Google Gemini API, Draco Compression

- **Spearheaded** the development of a gamified 3D interface utilizing **GSAP Timelines and Lenis smooth scrolling**, achieving hardware-accelerated animations and a consistent **77+ Lighthouse** Performance score on PC.
- **Engineered** a robust AI integration using the **Google Gemini API**, implementing model redundancy logic (Pro/Flash failover) to maintain high service availability and bypass API rate-limiting during peak loads.
- **Designed** a relational-style MongoDB schema to manage persistent session-based "Neural Memory," enabling the seamless linking of **1,000+ data points** across user histories, sessions, and chat logs.
- **Optimized** the delivery of 3D immersive assets by implementing **Draco mesh compression**, reducing model file sizes by over **65%** while maintaining visual fidelity across desktop and mobile browsers.
- **Streamlined development-to-production workflows** by containerizing the backend using Docker, ensuring environment parity and reducing manual deployment overhead by approximately **30%**.

## Education

- B.Tech in Computer Science – Chitkara University | Graduated [2025] | CGPA: 7.77/10

Sept 2021 - Aug 2025