

MOHAN SHAILENDRA YADAV

SOFTWARE ENGINEER · AI / FULL STACK

Email: mohanshyadav@gmail.com | Phone: +91 93247 73179 | Address: Mumbai, India |
GitHub: github.com/mohan-i | LinkedIn: linkedin.com/in/mohan-yadav-developer | Portfolio: mohan-i.vercel.app

PROFESSIONAL SUMMARY

Student Technical Paper Researcher | MCA Candidate (2027) | HackWithInfy 2026 semi-finalist specializing in distributed architectures, predictive algorithms, and AI/ML integrations. Active contribution for research paper on the topic - 'AI Usage is Bankrupting Open Source' presented at MULTICON-W 2026.

TECHNICAL SKILLS

Languages: C, Java, HTML, CSS + Tailwind, JavaScript, TypeScript, Python, PostgreSQL, PHP
Frameworks: React, Next.js, Node.js, Express.js, Spring Boot, Hibernate, Web Content Management Systems (CMS)
Systems & DevOps: Docker, AWS (EC2/S3), Git/GitHub CI, RESTful APIs, Microservices (OAuth 2.0), Message Queues (Kafka/RabbitMQ familiarity), Unit Testing (JUnit/Jest)
Engineering Depth: System Design, Concurrency Control, Distributed Caching (Redis), RESTful AI API Integration, Multi-threading, Data Analysis (NumPy, Pandas familiarity)

WORK EXPERIENCE

PVR SOLUTION – Full Stack Web Developer

Jan 2024 – Dec 2024

- Led and mentored a team of junior developers while implementing a secure, centralized **OAuth 2.0 authentication architecture** using Node.js, integrating token-based verification and session management strategies to unify access control across 5+ internal web applications.
- Designed different high-concurrency CRM systems (PHP/Express.js/MySQL) with connection pooling and index tuning, reducing query response time by **40%** for 10k+ customer records. Integrated Cloudflare CDN & Git-flow CI/CD, improving deployment velocity and system reliability.

ULTIMA SPECIALTIES PVT LTD – Front-End Developer (Contract / Project-Based)

July 2023 – Sep 2023

- Architected and deployed the official web platform for a new business division, handling initial UI/UX, responsive design, and SEO optimization. Implemented web analytics and lead-capture systems before successfully transitioning platform operations to an external agency upon project completion.
- Refactored product catalog query flows by utilizing optimized **string-filtering algorithms and prefix search logic**, minimizing indexing delays and accelerating autocomplete search responsiveness for over 5,000 product variants.

PROJECTS

Genetix: Probability Trait Engine

[Live Link → https://genetix-lake.vercel.app/](https://genetix-lake.vercel.app/)

Architected a high-performance genetic probability engine using **C and WebAssembly (WASM)**, achieving near-native execution speeds within a browser-based TypeScript (TSX) runtime. Implemented a predictive based machine learning Bayesian inference model to compute complex probabilities for Mendelian inheritance traits, optimizing mathematical computations for sub-millisecond execution.

PVR Solution Website

[Live Link → https://pvrsolution.com](https://pvrsolution.com)

Optimized asset delivery architecture using Cloudflare CDN, lazy loading, and image compression algorithms, reducing load times by 35% and maintaining 99.9% availability for 2k+ daily visitors.

EDUCATION

MCA, Thakur College of Engineering (TCET) | GPA: 8.59/10 | Mumbai, India

Aug 2025 – Expected May 2027 • Advanced DSA, Distributed Systems, System Design, OS, Concurrency

B.Sc. IT, Shailendra Education Society | GPA: 8.55/10 | University of Mumbai | Mumbai, India

May 2020 – Jan 2024 • DBMS, AI & ML, Computer Networks, Data Structures, OpenCV, Scikit-Learn

CERTIFICATIONS

Android App Development – 2nd Prize Shailendra Education Society	2022
JavaScript Algorithms & Data Structures – freeCodeCamp	2024
React (Basic) – HackerRank	2024
Build Battle Department Level Coding Competition - 3rd Prize TCET	2026