

# Pankaj Yadav

LinkedIn: [pankaj-yadav-dev](#)

GitHub: [pankajyadav-dev](#)

Email: [yadavpankaj.tech@gmail.com](mailto:yadavpankaj.tech@gmail.com)

Mobile: +91-9636902439

## SKILLS

- **Languages:** C++, JavaScript, TypeScript
- **Frameworks:** React, Next.JS, NodeJS
- **Tools/Platforms:** Linux, MonoRepo (Turborepo), Git, Docker, Nginx, AWS (EC2, S3, CloudFront/CDN)
- **Databases/ORM:** Postgres, MongoDB, Prisma
- **Core CS Fundamentals:** DSA, DBMS, OOP, Operating System, Computer Networks
- **Soft Skills:** Problem-Solving, Adaptability, Team Collaboration, Quick Learner

## PROJECTS

- **XForces** | [xforces.1000xdevs.dev](#) | [Github](#) Jan' 26 - Present  
**Distributed Code Judge System**  
**Tech Stack:** Next.JS, TypeScript, Turborepo, Redis, Docker, PostgreSQL, Prisma
  - System Architecture: Applied **Producer-Consumer pattern** using Redis Streams to decouple worker and app.
  - Asynchronous Task Processing: Constructed a decoupled worker service in **TypeScript** that consumes code submission tasks from the **Redis-backed stream**.
  - Containerized Execution Sandbox: Architected a secure execution layer using **Docker** to isolate user code.
  - Type-Safe Distributed Communication: Leveraged TypeScript shared interface across frontend, backend and worker to ensure **100% contract consistency, reduce runtime integration bugs by nearly 40%**.
  - Resource Management and Limits: Enforced strict execution constraints **using Docker Flags (memory limits, CPU shares)** to mitigate "Infinite Loop" or "Memory Leak" attacks from user submission.
- **CallbackTicket** | [callbackticket.1000xdevs.dev](#) | [Github](#) Mar' 25  
**AI-Powered Resume Builder**  
**Tech Stack:** React, Next.JS, JWT, Tailwind CSS, Google Gemini API, MongoDB
  - Generative AI Integration: Leveraged the Google Gemini API to architect an intelligent resume generator that transforms raw user profile data into professionally tailored resumes based on specific job descriptions.
  - Automated Content Analysis: Engineered a smart analysis system including **ATS Compatibility Checker, Grammar and spelling validator and Originality Detector** using AI-driven text processing.
  - Dynamic Template Engine: Expanded customized UI that supports multiple professional layouts (Modern, Technical, Academic) using Rich Text Editor interface for real-time resume customization.
  - Secure Authentication System: Implemented a robust user auth flow using **JWT with HTTP-only cookies**, ensuring secure profile management and protecting sensitive user career data.

## TRAINING

- **Full-Stack Web Development (MERN) – Cipher School** | [certificate](#) Jun' 25 - Jul' 25
  - Mastered the MERN stack to build scalable, data-driven web applications.
  - Developed two full-stack projects utilized RESTful APIs, JWT-based authentication, Middleware, Indexing, Security
- **Version Control System (Git & GitHub) – Cipher School** | [certificate](#) Jun' 25 - Jul' 25
  - Learned to manage project source code using git and GitHub (branching, merging, pull request)
  - Practiced documenting technical progress using markdown to maintain clean and readable repositories.

## CERTIFICATES & LEARNING

- Cloud Computing | NPTEL Online Certification (IIT Kharagpur) | [certificate](#) Jul' 25 - Nov' 25
- System Programming: Actively mastering Rust through performance-focused mini-projects. Jan' 26 - Present

## Achievements

- Solved 300+ coding problems across **Leetcode, GFG & CodeForces**, sharpening problem-solving skills
- 1<sup>st</sup> out of 87 teams in LPU web building competition, demonstrating effective collaboration Jan' 24

## EDUCATION

- **Lovely Professional University** Phagwara, Punjab  
*Bachelor of Technology - Computer Science and Engineering; CGPA: 8.9* Aug' 23 - Present
- **The Trigat School** Tijara, Rajasthan  
*Intermediate; Percentage: 77* Apr' 22 - Jun' 23
- **The Trigat School** Tijara, Rajasthan  
*Matriculation; Percentage: 87* Apr' 20 - Jun' 21