

Priyanshu Kumar Singh

[Gmail](#) | [GitHub](#) | [X \(Twitter\)](#)

Technical Skills

Programming Languages: TypeScript, JavaScript, Python

Frontend: Next.js, React.js, Tailwind CSS

Backend: FastAPI, Node.js, Express.js, GitHub Actions, Docker

Database: MongoDB, MySQL, PostgreSQL, Redis

Projects

- **SkillForge: AI Assisted Job Portal** *FastAPI, Next.js, PostgreSQL, Redis, pgvector, OpenAI API, TypeScript*
[GitHub](#) | [Live](#)

- Designed an explainable, AI-assisted matching system that avoids black-box scoring by combining deterministic logic with semantic embeddings.
- Implemented JWT-based authentication using HttpOnly cookies to mitigate XSS.
- Implemented PostgreSQL full-text search using tsvector with weighted ranking.
- Designed secure PDF upload pipeline using S3-compatible storage.
- Integrated OpenAI API to extract structured candidate data from raw resume text and Stored normalized output in JSONB for flexible querying and future extensibility.
- Implemented event-driven processing: new job postings trigger background tasks instead of synchronous computation.
- Implemented logic-first skill gap detection by comparing job requirements with candidate profiles.
- Implemented Redis-based rate limiting (token bucket / sliding window) to prevent abuse on auth and search endpoints.
- Moved AI parsing and matching logic out of request-response cycle using background tasks to improve latency and reliability.

- **PlanIt: Notes App**

MongoDB, Express.js, React.js, Node.js, JWT, Auth0

[GitHub](#) | [Live](#)

- Engineered a full-stack Notes App with JWT and Auth0 authentication, securing user data for 50+ active users.
- Implemented image upload functionality using Multer and Cloudinary, reducing image load times by 40% compared to base64 encoding.
- Deployed a scalable backend on Railway and a CDN-fronted on Vercel, achieving 100% uptime.

Education

Bachelor of Computer Application (BCA)

Expected Grad: 2027

Dehradun Institute of Technology, Dehradun, India

Relevant Coursework: Data Structures & Algorithms, Database Management, Computer Networking