

Harsh Pandey

Dwarika, New Delhi | harshp6421@gmail.com | LinkedIn |

Github | Certificates

Education

Rajkiya Engineering College Sonbhadra, Bachelor of Technology in Computer Science and Engineering	Sept 2021 – June 2025
Sunbeam Academy Samneghat, Secondary School	2020
Sunbeam Academy Samneghat, High School	2018

Experience

Software Engineer, BerriBot March 2026 – Present

- Building real-time **AI voice and video tutoring agents**
- Designed and implemented AI-powered learning modules including syllabus generation, planner bots, coding assessments, Karat mock interviews, verification pipelines, and automated course progression.
- Developed backend services using **FastAPI**, PostgreSQL, and Supabase, implementing scalable APIs, background jobs, retry mechanisms, database migrations, and deployment management.
- Built AI-based proctoring systems with video recording, monitoring, secure storage, and candidate evaluation workflows.
- Implemented reporting infrastructure including PDF report generation, progress analytics, certification workflows, deployment dashboards, and admin analytics.
- Developed enterprise administration features including deployment creation, candidate enrollment, course assignment, syllabus management, restart workflows, scoring algorithms, and certification management.
- Diagnosed and resolved production issues across AI agents, real-time voice pipelines, learning workflows, reporting systems, dashboards, and enterprise deployments, significantly improving platform reliability.
- Collaborated closely with product, engineering, and enterprise stakeholders to deliver production-ready AI features from design through deployment.

Full Stack Engineer, SkillSync. March 2025 – March 2026

- Designed, developed, and deployed a **unified agentic AI-powered interview platform**, combining multi-round AI interviews with **LiveKit-based WebRTC** for real-time audio/video interactions.
- Implemented **multi-agent interview orchestration**, where AI agents conducted different interview rounds (screening, technical, behavioral) within a single live interview flow.
- Built the **real-time interview experience** using **LiveKit (WebRTC)**, handling session lifecycle management, low-latency media streaming, reconnections, and reliability in production.
- Integrated **AI-generated interview questions and evaluation logic** dynamically adapted to job roles, interview stages, and candidate responses.
- Developed backend services using **FastAPI** to manage interview sessions, agent coordination, scoring pipelines, and interview data persistence.
- Worked extensively with **real-time systems**, addressing edge cases such as network instability, session drops, and partial interview recovery.
- Led a **database schema migration** from a legacy structure to an optimized design, ensuring data integrity and minimal production downtime.
- Built and maintained **background jobs and cron services** for notifications, reporting, and interview data synchronization.
- Collaborated closely with **founders and product stakeholders**, owning features end-to-end from requirements to production rollout.

Generative AI Intern, EY-Gurugram July 2024 – Aug 2024

- Developed a Bench Management System, an ERB portal built with **React.js**, to optimize the utilization of benched employees, reducing hiring costs.
- Implemented an **AI-powered chatbot using FastAPI, Gemini API, and fine-tuning** techniques to handle database-related queries and provide intelligent insights.
- Integrated interactive data visualization, including employee statistics and filterable graphs, for efficient resource management.
- Explored Generative AI technologies, gaining hands-on experience with **LLMs, LangChain, and model fine-tuning** for real-world applications.
- Collaborated with stakeholders to align AI solutions with business requirements, ensuring seamless adoption and operational efficiency.

Full Stack Developer Intern, Ransh Innovations-Remote November 2023 – May 2024

- Worked as a **Full-Stack (MERN) Developer** at an early-stage startup, gaining hands-on experience in company operations and best practices.
- Developed and optimized **RESTful APIs**, ensuring high performance, scalability, and security.
- Implemented secure authentication and data protection mechanisms to safeguard sensitive information.
- Translated Figma designs into functional user interfaces, improving both front-end usability and back-end integration.
- Wrote unit tests for front-end components to enhance code reliability and maintainability.
- Collaborated directly with the founder to design schemas and explore High-Level (HLD) and Low-Level (LLD) system architectures.
- Quickly adapted to new technologies and agile methodologies to meet dynamic project requirements.

Tech Stack & Skills

Programming Languages: Python • JavaScript (ES6+) • TypeScript

Frontend Technologies: HTML5 • CSS3 • Tailwind CSS • React.js • Next.js

Backend Technologies: Node.js • Express.js • FastAPI • REST APIs • Authentication (JWT, OAuth, 2FA)

Databases & ORMs: PostgreSQL • MongoDB • Firebase • Prisma ORM

AI & Generative AI: Large Language Models (LLMs) • LangChain • LangGraph • Prompt Engineering

DevOps & Tooling: Git • GitHub • Docker • Kubernetes • CI/CD • Cron Jobs • Inngest

Soft Skills: Problem-Solving • Ownership • Collaboration • Leadership • Communication • Fast Learner

Projects

Interview Genie – AI-Powered Career Platform



- Developed an AI-powered platform providing job insights, AI-based resume building, cover letters, quizzes, and career analytics.
- Implemented **AI features using Google's Gemini API** for resume generation, cover letter suggestions, and **AI-driven career insights**.
- Built with **Next.js, PostgreSQL, Prisma ORM**, and integrated **Inngest** for cron jobs and background tasks.
- Designed interactive data visualizations using **Recharts** for career trends and insights.
- Ensured robust form validation and user input handling using **Zod** and **React Hook Form**.

Gymkhana – Fitness Tracking Platform



- Built a comprehensive fitness tracking application using the **MERN stack**.
- Developed role-based **Admin and User Panels** for better management and user experience.
- Integrated **interactive charts** to visualize user progress and key fitness metrics.
- Implemented **secure authentication and authorization** to ensure data privacy and access control.

Achievements

- Achieved a **Top 100 rank** in **Girl Script Summer of Code**, an Open Source contribution program.
- Secured **1st place** in the college-level round of **Smart India Hackathon (SIH)** in both **2023 and 2024**.
- Qualified for the **Grand Finale of SIH 2024**.
- Served as a **Web Development Team Member** for 2 years and **Team Lead** in the final year at college.
- Independently developed the official website for **REC Mirzapur**, a state government engineering college. 🌐