MANOJ BARHPAGGA

Full-Stack Developer & Researcher in AI in Education.

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PROFESSIONAL SUMMERY

Versatile software developer and academic coordinator with expertise in modern web technologies, including Next.js, React, Node.js, and MongoDB. Successfully designed and maintained the digital infrastructure for an educational institute while instructing over 200 students in Python, and JavaScript. Combines robust coding capabilities with strong technical leadership, automated workflow integrations, and effective project management.

EXPERIENCE

Skillup institute, Garhshankar July, 2024 – Present

Full-Stack Developer & Academic Coordinator

- Built the institute's full-stack ecosystem deploying custom student and admin dashboards.
- Instructed 200+ students in Python and JavaScript, driving successful live project deliveries within 45-day sprints.
- Managed daily institute operations and parent communications, tracking student progress to ensure high course completion rates.
- Engineered secure REST APIs for user authentication, live online exams, and automated PDF certificate generation.

Freelance Web Developer January, 2023 – Present

Full-Stack Engineer

- Deployed responsive, high-performance web apps and portfolios using Next.js, React, and Tailwind CSS.
- Engineered an AI-driven IELTS prep app featuring automated scoring and custom evaluation workflows.
- Managed zero-downtime cloud deployments and version control via Git, Vercel, and Linux.

PROJECTS

Skillup Institute Webapp March, 2024 – Present

Link: https://www.skillupinstitute.co.in/

- Developed a responsive institute platform featuring custom student, faculty, and administrative portals.
- Built a comprehensive student record module to track enrolment history, academic progress, and performance metrics.
- Built an online testing module with automated evaluation logic and instantaneous score calculations.
- Implemented an AI-powered, multilingual doubt-solving assistant to provide real-time student support.
- Engineered secure backend APIs to generate verified, downloadable PDF completion certificates.
- Implemented role-based access control (RBAC) and secure JWT session management for seamless user tracking.
- Integrated a complete online learning module featuring live classes and structured course delivery

CoderShip AI September, 2025 – Present

Link: https://www.codershipai.com/

- Architected an interactive cloud IDE featuring real-time code editing and live execution previews for HTML, CSS, JavaScript, Python, C, and C++.
- Developed a real-time collaborative 'coding ship' environment, enabling students to program together synchronously as 'crew members'.
- Integrated secure GitHub OAuth for seamless user authentication, profile creation, and direct repository management.
- Engineered a scalable backend system to securely manage user data, isolate code environments, and handle concurrent execution requests

SKILLS & TOOLS

- **Web Technologies :** HTML, CSS, JS
- **Frameworks:** React, Next JS, MERN, Flask
- **Databases:** SQL, MongoDB
- **Deployment Tools:** Git & GitHub, VS Code, Chrome Dev tools, Linux, Docker
- **Hosting and Cloud services:** Varcel, Netlify
- **Languages:** HTML, CSS, JavaScript, Python
- **Deployment Concepts:** SSR, CSR, Restful APIs, JWT

EDUCATION

M.Sc.IT (Information Technology)
Institute: Lovely Professional University
2025-2027
Subjects: Advanced coursework in software engineering, database management, and modern web technologies.

Bachelor of Science (Non-Medical)
Institute: Punjab University
2021-2024
Subjects: Physics, Mathematics, Computer Science

CERTIFICATIONS

HTML, CSS & JavaScript for Web Developers)
Johns Hopkins University – Coursera

Meta Back-End Developer – Professional Certificate
Meta – Coursera