Kumar Harsh

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Summary

Full Stack Developer with strong foundations in **Data Structures & Algorithms** and **Object-Oriented Programming**. Hands-on experience building **scalable, production-grade systems** using **Spring Boot, React, Next.js, MongoDB, and AWS**. Worked on high-impact platforms at **Indian Institute of Science (IISc)** with exposure to **AI integrations**.

Skills

- **Programming Languages:** Java, JavaScript, Python, C++, SQL
- **Frontend:** React, Next.js, HTML, CSS, Tailwind CSS
- **Backend:** Spring Boot, Node.js, REST APIs, JWT, OAuth, Microservice Architecture (Concepts)
- **Databases:** MongoDB, Amazon DynamoDB
- **Cloud & Infrastructure:** AWS (EC2, S3, CloudWatch, Lambda, Cloudshell), Docker, NGINX, CI/CD
- **AI/ML:** LLM-based Systems (OpenAI APIs, Google Gemini APIs), LangChain

Experience

Indian Institute of Science (IISc), Bengaluru, India   **July 2025 – Present**
Full Stack Developer

- Led **end-to-end development** of an **international conference management system** using **Spring Boot, MongoDB, and React**, automating **registration, abstract submission, and payments** for **500+ participants**, eliminating **90% manual paperwork**.
- Integrated **secure multi-currency payments (INR/USD)** using **Razorpay**, implementing **webhook verification**, **transaction validation**, and **automated email notifications**.
- Built a **role-based admin dashboard** with **real-time Google Sheets synchronization** via **Google Sheets API**, improving **administrative efficiency by 75%**.
- Engineered a **full-stack Progressive Web App (PWA)** for a **4-day academic conference** using **Next.js and Spring Boot**, enabling **real-time updates** via **Spring WebSocket (STOMP)**.
- Implemented **JWT-based authentication** using **Spring Security** and **offline functionality** via **service workers**, supporting **100+ concurrent users** with **sub-second latency**.
- Developed a **geospatial analytics platform** for **CSIRO**, mapping **2,500+ industrial plants across India** using **React, TypeScript, Leaflet, and Supabase**, enabling **district-level bioenergy analysis**.

Founder & Developer (india-jobs.in)   **September 2025 - Present**
Founder & Full Stack Engineer (Part-time)

- Founded and built **India Jobs**, a **job aggregation platform** using **Next.js 14, TypeScript, Express.js, and AWS (DynamoDB, S3, EC2)** with **NGINX reverse proxy**, delivering **sub-second API responses** for large-scale job filtering.
- Developed an **AI-powered resume analysis system** using **Google Gemini API** to generate **instant CV match scores and job recommendations**, achieving **99.9% service reliability** through robust fallback handling.
- Designed and deployed **production-grade AWS infrastructure**, optimizing **DynamoDB partition keys**, configuring **CloudFront CDN**, **CloudWatch monitoring**, and **horizontal scaling** for traffic spikes.

Freelance (biharinathorganicfarms.com)   **November 2025**
Freelance Full Stack Developer (Part-time)

- Built a **full-stack e-commerce platform** using **Next.js, TypeScript, and MongoDB**, implementing **product management, cart, order processing**, and a **admin dashboard**.
- Integrated **Razorpay payments** (Online & COD), **JWT-based authentication with OTP verification**, and **automated email notifications** using **Nodemailer**.
- Converted the platform into a **Progressive Web App** using **Capacitor**, enabling **single-codebase deployment** for **Web, iOS, and Android**.

Intervue.io, Bengaluru, India   **September 2024 – June 2025**
Software Engineer Intern

- Automated **rubric creation** using **OpenAI APIs** in a **Node.js** environment, reducing **manual effort by 75%**.
- Engineered **15+ platform features** using **Next.js, Node.js, and REST APIs**, including **real-time assessment interfaces**, **user dashboards**, and **interview reports**.
- Improved **AI-driven skill matching accuracy** from **65% to 72%** through **text normalization and synonym mapping**.
- Contributed to **Agile development cycles**, including **sprint planning**, **feature delivery**, and **code reviews**.

Education

Chandigarh University   **September 2020 - May 2024**
B.E. in Computer Science and Engineering

Achievements

- Led Registration Desk operations at the **STIS-V International Conference**, coordinating volunteers, managing attendee registrations, handling on-site coordination, and resolving real-time issues.
- Secured **3rd** rank in weekly coding competition on GeekForGeeks.
- Secured **1st** rank in the Igebra AI Hackathon.
- Organized and led **5+** events in college as an Event Coordinator.
- **Guinness World Record Participant** – Largest Human waving flag formation, Chandigarh University, Aug 2022

Certifications

• React (Infowiz)   • AWS Architecting (AWS)   • Software Testing (NPTEL)   • Generative AI (Google Cloud)