

# HARSH KUMAR SINGH

 [itsharsh.com](https://itsharsh.com)

 Phone: [+91 8979604159](tel:+918979604159)

Team Lead | MERN Stack | 5+ yrs Experience in Soft Dev

 [/its-harsh](https://in.linkedin.com/in/its-harsh)

 Email: [hkumarsingh142@gmail.com](mailto:hkumarsingh142@gmail.com)

Immediate Joiner

 [/itsharsh](https://github.com/itsharsh)

Highly skilled **Team Lead** with a strong background in **Node.js & MongoDB**. Proven track record of leading teams to deliver complex projects, achieving a 20% increase in project delivery speed. Experienced at converting monolithic applications to **microservices** architecture, implementing multi-tenancy, and **optimizing** database performance leading to a 30% cost reduction. Experienced in **Agile** methodology and test-driven development.

## SKILLS

**Languages/ Frameworks:** Javascript, NodeJS, ExpressJS, ReactJS

**Databases:** MongoDB, Redis, MySQL(Familiar)

**Software Tools:** Git, Jest, Kafka, Docker, SonarQube

**Architecture/Cloud:** Microservices, Multitenancy, AWS (EC2, SES, S3)

## WORK EXPERIENCE

### Team Lead - Backend

(Aug'20 – Present)

#### Dhwani RIS, Gurgaon, HR

- Successfully converted the company's **core product mForm** from Monolithic to **Microservices Architecture** for 8 critical modules enhancing scalability and agility. Some include Role-based User Management, **Dynamic Form & Dashboard** builder, Monitoring Reports/Dashboards using **Aggregation Pipelines** etc.
- Developed and designed reusable high-performance dashboard components using **NodeJS** and **ExpressJS**, resulting in a **time-saving of 125+ dev. hours/month**.
- Initiated **Jest test cases** from scratch, establishing a robust testing culture for both the products.
- Developed a **Data Synchronization** tool using **Sequelize ORM** to sync data from **MongoDB to MySQL DB (50+ Lakh data)** from scratch for BI tool integration saving **30-40%** of development effort for custom projects.
- Cost Optimization - **Optimized DB**, leading to significant **cost savings of ₹55-60k** monthly on production servers.
- Implemented **multi-tenancy** seamlessly, expanding product capabilities, and facilitating **data migration**.
- Leveraged **Kafka** for data pipelines, ensuring real-time event logging and streamlined **bulk data processing**.
- Virtualized servers using **Docker** Containers for test/dev environments, and Jenkins continuous integration.
- Accountable for the overall SDLC process**. Implementing **agile methodology** across the entire product team.
- Elevated **code quality** through rigorous **code reviews**, resulting in a notable improvement in **SonarQube** grade.
- Led a team of **~10 engineers** in building core products (mForm & mGrant) with a **success of 25+ clients**.

### Software Engineer

(Jan'19 – Jul'20)

#### Oxygen 2 Innovation, Noida, UP

- Worked on IoT projects including SAS, IECS for **Health Monitoring** and **Position Tracking of soldiers**, Smart Plug Smart Mirror & developed web apps for them using **MERN Stack (NodeJS, MongoDB and ReactJS)**.
- Developed AdTracker, a tool for tracking 3 types of Ads(i.e FCT, Non-FCT, Branding) on live TV using YOLOv3.
- Created a Situational Awareness System for real-time object detection integrated with Army vehicles to detect and alert them about 18 different suspicious activities which arise in different Riot situations.
- Led and managed software-related activities and projects
- Introduced tools like **Git** (Version Control) & **ClickUp** (Project Management) in the organization's workflow.
- Worked on various robotics projects, including ATVs, payload delivery **drones**, and AI-powered smart mirrors.
- Contributed to building a tool to calculate **drone flight time** based on input parameters.

## ACHIEVEMENTS & HONORS

- ★ **Coding Standards Core Team** (Dhwani RIS) (01/2024) - Contributed to coding standards and practices.
- ★ **Team Leadership Award** (05/2023) - Delivered features on time, addressed critical bugs, and led team-building activities.
- ★ **Going Extra Mile Award** (08/2022) - Consistently exceeded daily deliverables and built effective products.
- ★ Demonstrated Robotics project to **Directorate of General of CRPF** (2020)
- ★ Published **Research Paper** in **IC3 Conference 2019** on the topic "**A step towards Home Automation using IoT**"

## EDUCATION

Degree	Discipline	Institute
B. Tech.	Computer Science	Jaypee Institute of Information Technology, Noida (2019)
Senior Secondary	CBSE	Delhi Public School, Agra (2015)
High School	CBSE	Delhi Public School, Agra (2013)

## HOBBIES

Music, Badminton, Trekking, Sudoku, Chess