

Dipanshu Saini

Specialist Programmer



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 Rewari, India  Indian  He/Him

 Portfolio  LinkedIn  Github

Motivated software developer with hands-on experience in web technologies including React, Node.js, and MongoDB. Passionate about solving real-world problems through clean code and scalable systems, while actively exploring modern tech stacks and evolving development trends.

Professional Experience

Specialist Programmer, Infosys  12/2024 – present | India

- Gained hands-on experience working with **PySpark, Python, UNIX scripting, MongoDB, and SQL** for data processing and transformation tasks.
- Wrote **UNIX queries for data processing and filtering**, and developed **shell scripts for data cleaning, processing, and transformation** tasks in Big Data workflows.
- Practiced SQL-based querying for data retrieval, joins, and aggregations within analytical workflows.
- Acquired a **basic understanding** of real-time processing concepts using **Kafka** and **PySpark Streaming**.
- Explored data ecosystem components like **Data Lakes, Data Warehouses, and Data Factories** at a conceptual level.

Web Developer Intern, MRM Procom  01/2024 – 10/2024
Faridabad, India

Project 1: IoT Device Management System (React, Node.js, MongoDB)

- Developed a platform to manage IoT device ownership, billing, and access control using **React.js, Node.js, and MongoDB**.
- Built and consumed **REST APIs** for both user and admin roles, including assigning/removing admin permissions, tracking device location, and managing billing status via external API integration.
- Implemented secure **JWT-based authentication**, and maintained version control with **Git & GitHub**.

Project 2: IoT Device Interface (React, PHP, SQL, MQTT)

- Created a dynamic interface enabling real-time interaction with IoT devices, including **data visualization, firmware/software updates, report generation, and command execution**.
- Used **MQTT** for device communication, with **PHP** and **SQL** handling backend operations and device data storage.

- Integrated **role-based access**, allowing only authorized users to control devices, while others had view-only access.
- Applied **TanStack Query** for efficient data fetching and **cookies** for secure session management.

Projects

Vidly, Movie Rental Web Application

05/2023 – 11/2023

Tech Stack: React.js, Node.js, Express.js, MongoDB, JavaScript, Bootstrap, Git

- Designed and developed a full-stack movie rental platform with distinct user and admin interfaces.
- Built a **dedicated admin panel** for managing movies, genres, customers, and rental operations, including creating, updating, and deleting records.
- Developed **RESTful APIs** using **Node.js** and **Express.js** to support backend functionality and secure data exchange.
- Implemented **JWT-based authentication and role-based access control** to differentiate admin and user privileges.
- Created a **React.js** frontend for users to browse and rent movies with filtering, sorting, and pagination.
- Utilized **MongoDB** to store movie listings, user details, and rental history.
- Applied **Bootstrap & Material UI** for clean UI/UX and **Git/GitHub** for version control and collaboration.

ChatQT, Real-time Chat Application

11/2023 – 12/2023

Tech Stack: React.js, Node.js, MQTT, JavaScript, Express, CSS, Git

- Built a real-time web-based chat app using **React.js** for frontend and **Node.js** as the backend, with **MQTT** protocol for lightweight, fast, and efficient message delivery.
- Implemented **publish-subscribe messaging** using MQTT to enable seamless, real-time communication across users.
- Designed a responsive and intuitive UI allowing users to send, receive, and view chat history in real time.
- Used **Express.js** to set up the server and route chat messages, with MQTT broker handling message distribution.
- Employed **Git** and **GitHub** for version control and collaboration.

Sorting Visualizer

09/2024 – 09/2024

Tech Stack: React.js, JavaScript, CSS Built an interactive tool to visualize sorting algorithms (Quick, Merge, Bubble, etc.) with animated bar charts, adjustable speed controls, and real-time UI updates using React state management.

Skills

Languages

JavaScript, Python, Java, SQL, HTML5, CSS3

Frontend

React.js, TanStack Query, Framer Motion, Material UI

Backend

Node.js, Express.js, MQTT, Mongoose, MongoDB, SQL

Tools

Git, GitHub, REST API, Postman, VS Code

Others

Unix (shell scripting & data processing), JWT, Cookies & Session Management, Agile Workflow

Education

J.C. Bose University of Sciences and Technology, YMCA, B. Tech

11/2020 – 06/2024
Faridabad, India

Completed B.Tech in Electronics and Communication Engineering with 8+ CGPA. Driven by a strong interest in IT and software development, I pursued my passion by building skills in programming, web development, and modern technologies to transition into a software engineering role.

Languages

English



Hindi



Courses

German, IIT-Madras

Completed A1 and A2 level German language MOOC courses, gaining foundational proficiency in reading, writing, and conversational German.