

# PATEL JAYKUMAR RAKESHBHAI

+91 7046249240 - - [jay91451@gmail.com](mailto:jay91451@gmail.com) - [LinkedIn](#) - [GitHub](#) - [GeeksforGeeks](#)

## SUMMARY

---

Aspiring Software Engineer with a solid foundation in Data Structures, Algorithms, OOPs, and Web Development. Skilled in building real-time, scalable applications using MERN stack, Socket.io, and REST APIs. Eager to contribute to impactful software solutions through strong problem-solving and continuous learning.

## EDUCATION

---

**Shree Swaminarayan Institute of Technology**

*Bachelor of Technology - Computer Science; CGPA 9.26*

**Gujarat, India**

*2023 - 2027*

## TECHNICAL SKILLS

---

**Programming Languages:** JavaScript, Python, C/C++, SQL

**Tools and Platforms:** Git, GitHub, VS Code, Postman, PyCharm, Anaconda, MongoDB Compass

**Libraries and Databases:** Socket.io, JWT, MongoDB, Express.js, Mongoose

**Technologies and Frameworks:** React.js, Node.js, HTML5, CSS3, Tailwind CSS, Bootstrap, Django, REST APIs

**Additional Skills:** Data Structures & Algorithms, OOPs, Problem Solving, Responsive Web Design, Version Control

## PROJECTS

---

### URL Shortener Web App [Link](#)

*Tech Stack: React.js, Node.js, Express.js, MongoDB, Tailwind CSS, QR Code API*

- Built a full-stack URL shortening platform with advanced link analytics, handling 1000+ requests/day.
- Developed REST APIs supporting both random and custom alias creation with support for password protection and expiry-based auto-deactivation.
- I Integrated QR code generation for each short URL and a dynamic dashboard displaying click count, referrer source, device type, and location.
- Designed a responsive UI using React and Tailwind CSS, optimized for mobile devices and high-traffic usage.

### Real-Time Chat Web App [Link](#)

*Tech Stack: React.js, Node.js, Express.js, MongoDB, JWT, Socket.io, Tailwind CSS*

- Built a secure, scalable chat platform supporting real-time one-to-one messaging with delivery acknowledgment tones (like WhatsApp).
- Implemented secure JWT-based authentication and real-time messaging using WebSocket's.
- Implemented username-based user search for quick global connectivity — simulating a “World Chat” system.
- Designed a responsive and intuitive interface using React and Tailwind CSS.

### Sudoku Solver in JavaScript [Link](#)

*Tech Stack: React.js, Node.js, Express.js, MongoDB, JavaScript, DSA (Backtracking), Tailwind CSS*

- Built a full-stack Sudoku solver using MERN with a backend backtracking algorithm to solve 9x9 puzzles efficiently.
- Developed RESTful APIs in Express.js to handle puzzle validation, solution logic, and smart hint generation.
- Implemented real-time input validation and error detection on a responsive React UI with Tailwind CSS.
- Optimized the solving engine using core DSA techniques, with optional features like difficulty levels and puzzle history.

## ACHIEVEMENTS

---

- Solved 200+ DSA problems across LeetCode and GeeksforGeeks with consistent focus on optimization and edge case handling.
- 3-Star in Problem Solving on HackerRank, demonstrating strong grasp of algorithms and data structures.
- Secured 9.65 CGPA in Diploma, ranked top in college during 6th semester under Gujarat Technological University.
- Certified in AI & Green Skills (Edunet), Next.js(GFG), Advanced JavaScript (GFG), and HackerRank Intermediate.
- Currently participating in the GeeksforGeeks 160 Days DSA Challenge to strengthen core programming fundamentals.
- Ranked 1st in 3<sup>rd</sup> Sem B.Tech with 9.26 CGPA.