Ram Krishna

📞 +91-9244088448 | ✉ krishnarammhd@gmail.com | 🔗 LinkedIn | ⌨ GitHub | ⟨⟩ LeetCode

Professional Summary

Results-driven Computer Science undergraduate specializing in **full-stack web development** with expertise in the **MERN stack** and modern TypeScript applications. Demonstrated ability to architect and deploy **production-grade systems** including a real-time Visitor Management System with **role-based access control (RBAC)** serving multiple user roles, and a secure Expense Tracker with **JWT authentication** and cloud-based media management. Proficient in building **scalable RESTful APIs**, implementing **real-time data synchronization** with **WebSocket** connections and **Supabase Realtime**, and optimizing React applications for **70% performance improvements**. Strong foundation in **database design (SQL/NoSQL)**, **serverless architecture**, and deployment experience on Vercel. Solved **300+ algorithmic problems** (LeetCode rating 1500+) with expertise in Dynamic Programming, Graph Algorithms, and System Design. Seeking Software Development Engineer Internship to contribute technical excellence and deliver high-impact solutions.

Education

Indian Institute of Information Technology, Nagpur — **Aug 2023 – May 2027**
Bachelor of Technology in Computer Science & Engineering | CGPA: 6.64/10.0 — *Nagpur, Maharashtra*
- **Relevant Coursework:** Data Structures & Algorithms, Object-Oriented Programming, Database Management Systems, Computer Networks, Operating Systems, Software Engineering, Web Technologies

Sanskar Public School — **May 2022**
Higher Secondary Certificate (XII), CBSE | Percentage: 81% — *Gwalior, Madhya Pradesh*

St. Paul's School — **May 2020**
Secondary School Certificate (X), CBSE | Percentage: 88% — *Gwalior, Madhya Pradesh*

Technical Skills

Programming Languages: JavaScript (ES6+), TypeScript, C++, C, Python, HTML5, CSS3, SQL

Frontend Technologies: React.js (Hooks, Context API, Performance Optimization), Redux (State Management), Tailwind CSS, Bootstrap, Material-UI, Responsive Design

Backend Technologies: Node.js, Express.js, RESTful API Design, WebSocket, JWT Authentication, OAuth 2.0, Middleware Architecture, Session Management, Serverless Functions

Databases: MongoDB (Mongoose ODM, Aggregation), PostgreSQL, Supabase (Realtime, RLS), MySQL, Database Design, SQL Optimization, Indexing

DevOps & Cloud: Git, GitHub, Docker, Vercel, Environment Configuration, Cloudinary (CDN, Media Management)

Tools & Platforms: VS Code, Postman (API Testing), Chrome DevTools, npm/yarn, Webpack, Vite, Babel, ESLint, Prettier

Software Engineering: Data Structures & Algorithms, Object-Oriented Programming (OOP), System Design, SDLC, Test-Driven Development (TDD), Code Reviews, Design Patterns

Soft Skills: Problem Solving, Analytical Thinking, Technical Documentation, Team Collaboration, Communication, Time Management

Projects

Visitor Management System | GitHub
Tech Stack: React, TypeScript, Supabase (Auth + Realtime + RLS), Tailwind CSS, Vite
- Engineered a **full-stack Visitor Management System** with **Supabase backend**, implementing **role-based access control (RBAC)** and **Row Level Security (RLS)** policies for secure data access across Admin, Guard, and Host roles
- Integrated **Supabase Realtime** for instant synchronization of visit approvals, check-ins, and status updates across all connected devices, reducing approval latency by **90%**
- Developed **QR code-based verification system** for contactless check-ins and automated **email notifications** using Supabase triggers, improving operational efficiency
- Built **responsive dashboards** using TypeScript and Tailwind CSS with complete SQL schema and deployment configuration for reproducible production setup

Expense Tracker | GitHub | Live Demo
Tech Stack: React 19, Node.js, Express.js, MongoDB, JWT, Cloudinary, Tailwind CSS, Vercel
- Developed a **production-grade financial tracking application** serving interactive dashboards with **category-based analytics**, charts, and expense visualization using React.js and Chart.js
- Implemented **secure authentication system** using **JWT tokens** with refresh token mechanism, protected routes, bcrypt password hashing, and session management
- Integrated **Cloudinary API** for profile image upload at signup with Multer middleware, enabling cloud-based image storage, automatic optimization, and CDN delivery for enhanced user profiles

- Built **RESTful API backend** with Express.js and MongoDB, featuring Excel export functionality, advanced search filters, pagination, and comprehensive error handling
- Deployed full-stack application on **Vercel** with serverless Express functions and environment-based configuration management

Advanced Stopwatch Application | [GitHub](#) | [Live](#)
Tech Stack: React.js, JavaScript ES6+, CSS3, LocalStorage, Vercel

- Built a high-precision stopwatch with **microsecond-level accuracy**, lap tracking, split times, and persistent state management using LocalStorage API
- Optimized React performance using **React.memo**, **useCallback**, and **useMemo** hooks, reducing unnecessary re-renders by **70%**
- Implemented theme system with smooth animations, modular component architecture, and responsive design for cross-device compatibility

Tic-Tac-Toe Game | [GitHub](#)
Tech Stack: HTML5, CSS3, Vanilla JavaScript

- Developed an interactive two-player Tic-Tac-Toe game with real-time gameplay, winner detection algorithm, and draw condition handling using vanilla JavaScript
- Designed responsive UI with smooth animations, sound effects, winning-path highlights, and score tracking using CSS3 and modern JavaScript
- Implemented efficient game state management and DOM manipulation for seamless user experience with reset and new game functionality

Achievements & Certifications

Competitive Programming: Solved **300+ DSA problems** across LeetCode (Rating: **1500+**), GeeksforGeeks, and Codeforces with expertise in **Dynamic Programming**, **Graph Algorithms**, **Trees**, **Backtracking**, and **Sliding Window** techniques

Data Structures & Algorithms Mastery Course - Abdul Bari (Udemy): Comprehensive 50+ hour certification covering advanced DSA concepts including Algorithm Analysis, Recursion, Sorting & Searching Algorithms, Greedy Methods, Divide & Conquer, and Complexity Theory

Web Development Specialization: Completed full-stack development courses covering React.js, Node.js, Express.js, MongoDB, RESTful API design, authentication strategies, and modern JavaScript (ES6+) with hands-on projects

Interview Preparation: Actively following **Striver's A2Z DSA Sheet** (180+ problems completed) and **Blind 75** leetcode patterns for systematic interview preparation with focus on FAANG-level problem solving

Additional Information

Software Engineering Practices: Proficient in complete **Software Development Life Cycle (SDLC)**, **Agile/Scrum methodology**, sprint planning, code reviews, pair programming, and Test-Driven Development (TDD) principles

Version Control & Collaboration: Proficient with **Git/GitHub** workflows including branching strategies, merge conflict resolution, pull requests, code reviews, and collaborative development in distributed teams

Cloud & Deployment: Hands-on experience deploying full-stack applications on **Vercel** with environment configuration, serverless functions, automated testing, and production monitoring

API Development & Integration: Experience building and consuming **RESTful APIs**, implementing authentication (JWT, OAuth), API documentation with Postman, rate limiting, error handling, and third-party API integrations (Cloudinary, Payment Gateways)

Database Management: Working knowledge of database design principles, **SQL optimization**, indexing strategies, normalization, NoSQL data modeling, and experience with both relational (PostgreSQL, MySQL) and non-relational (MongoDB) databases

Professional Skills: Exceptional problem-solving abilities, strong analytical thinking, effective technical communication, team collaboration, time management, and dedication to writing **clean, scalable, and maintainable code** following industry best practices