

KUNAL CHAUDHARI

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PROFESSIONAL SUMMARY

Full Stack Developer (MERN Stack) with 2+ years of experience building and deploying production web applications across healthcare, enterprise inventory, e-commerce and hospitality domains. Delivered 800+ REST API endpoints using Node.js, Express.js, MongoDB and React.js, with JWT authentication, Role-Based Access Control (RBAC), Socket.IO real-time communication and MongoDB aggregation pipelines. Experienced in Docker containerization, Linux deployment, database design and production support.

TECHNICAL SKILLS

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

Backend: Node.js, Express.js, REST API Development & Design, JWT (JSON Web Token) Authentication, Role-Based Access Control (RBAC), Socket.IO, Server-Sent Events (SSE), LDAP Authentication, Node-Cron, BullMQ, Nodemailer, Multer, CSV Processing (PapaParse), Middleware Development, Pagination, Winston Logging, Modular Backend Architecture

Databases: MongoDB, Mongoose ODM, Redis, Schema Design, Data Modeling, Aggregation Pipelines, Indexing, Query Optimization, MySQL

Frontend: React.js, Redux Toolkit, React Query (TanStack Query), React Router, Vite, Ant Design, Tailwind CSS, Bootstrap

Cloud & DevOps: AWS (EC2, S3, IAM), DigitalOcean, Docker, Docker Compose, Linux (Ubuntu), Nginx, PM2, IIS, Cloudflare CDN, SSH, DNS & SSL Configuration

System Design: Scalable Backend Architecture, REST API Design, Database Design, Real-Time Application Architecture, Caching Strategies, Load Balancing, Inventory Management Systems, Hotel Booking System Architecture

Integrations: Razorpay Payment Gateway, Shiprocket, Delhivery, Third-Party REST APIs, Firebase Cloud Messaging, Bunny CDN

Data & Machine Learning: Python, Pandas, NumPy, Scikit-learn, Matplotlib, Seaborn, Exploratory Data Analysis (EDA), Feature Engineering, Principal Component Analysis (PCA), Regression Models, Cross-Validation, Model Evaluation (R^2 , MAE, RMSLE), Power BI, Tableau

Familiar With: WebRTC, LiveKit, Mediasoup, SFU Architecture, CI/CD (GitHub Actions), Kubernetes, Microservices, Distributed Systems

WORK EXPERIENCE

Webbrains Technologies | Full Stack Developer (MERN Stack)

Vadodara, India | Feb 2025 – Present

- Delivered backend and frontend services for five client platforms across healthcare, enterprise inventory, logistics, e-commerce and hospitality – 800+ REST API endpoints over 145+ Mongoose models.
- Implemented JWT authentication and granular Role-Based Access Control (RBAC) with dynamic role and permission models, securing separate admin, merchant, doctor and operator dashboards.
- Engineered a Redis-backed caching layer and hardened APIs with Helmet, rate limiting and input sanitization for a hospitality booking CMS, eliminating repeated database reads on high-traffic content endpoints.
- Integrated third-party services across client platforms: Razorpay payment gateway with signature verification, Shiprocket and Delhivery logistics APIs for shipment creation and live tracking, and Firebase Cloud Messaging for push notifications.
- Automated recurring operations with Node-Cron and Nodemailer – shift reports, invoice reminders, stock summaries – and built real-time features using Socket.IO and Server-Sent Events.
- Containerized services with Docker Compose and deployed to Linux (Ubuntu) on AWS EC2 and DigitalOcean using Nginx, PM2 and SSL; resolved production defects via Winston log analysis and optimized slow aggregation queries with compound indexes.

Disha Info Tech | Data Analytics

Pune, India | Jan 2022 – Jan 2023

- Analyzed business datasets using MySQL and Advanced Excel with 100% accuracy across data migration tasks, and built Tableau and Power BI dashboards for operational reporting.

KEY PROJECTS

Cure & Care – Healthcare & E-Pharmacy Platform

Aug 2025 – Present

MERN Stack, Socket.IO, Razorpay | Client Project – Webbrains Technologies

- Delivered 406 REST API endpoints across 53 Mongoose models powering four applications: patient web app, doctor portal, admin panel and mobile APIs.
- Built doctor appointment scheduling with availability slots, PDF prescription generation, lab test ordering and insurance modules.

- Integrated Razorpay with signature-verification middleware, and implemented MongoDB aggregation pipelines for dashboard analytics with real-time notifications over Socket.IO.
- Developed bulk XLSX import and export for products, brands and categories, a coupon and offer engine with city-wise stock allocation, and Bunny CDN media storage with image optimization.

TATA Advanced Systems – Inventory & Stock Management System

Jun 2025 – Present

MERN Stack, LDAP, PapaParse | Client Project – Webbrains Technologies

- Developed an enterprise inventory platform of 169 REST API endpoints and 26 models covering stock issue and return workflows, bin and rack management and calibration tracking.
- Integrated LDAP directory authentication for enterprise single sign-on with role-based permissions for Admin, Manager and Operator roles.
- Built a full audit logging system recording every stock transaction with user attribution and timestamps for inventory reconciliation, plus CSV import/export and automated shift-wise email reports.

DemandTrans – Corporate CMS & Product Catalog Platform

Jun 2025 – Dec 2025

MERN Stack, Docker | Client Project – Webbrains Technologies

- Built a modular content management backend of 146 REST API endpoints across 29 models with reusable audit and validation middleware and Winston daily-rotate logging.
- Containerized and deployed the full stack with Docker Compose, configuring multi-service builds, environment files, persistent volumes and automatic restart policies.

Study-Flow – Real-Time Study Productivity Platform

Jul 2026 – Present

MERN Stack, Redis, BullMQ, Socket.IO, SSE | Client Project – Webbrains Technologies

- Scaled real-time communication horizontally using Socket.IO with a Redis adapter and Server-Sent Events for live participant counts across 79 REST API endpoints.
- Designed gamification systems across 15 Mongoose models – study rooms, sessions, goals, streaks, ranks, badges and leaderboards – with rate limiting and security hardening.
- Built asynchronous processing with BullMQ job queues and 12 Node-Cron jobs, and integrated Razorpay subscription billing with Firebase push notifications.

NYC Taxi Trip Duration Prediction

2022 – 2023

Python, Pandas, NumPy, Scikit-learn | Academic Project – M.Sc. Information Technology

- Performed Exploratory Data Analysis and data cleaning on a ride-hailing trip dataset: corrected datatypes, log-transformed skewed trip duration, and removed invalid zero-passenger and outlier records.
- Engineered temporal features from pickup and dropoff timestamps, applied StandardScaler scaling, and reduced dimensionality with PCA (12 components selected via cumulative variance analysis).
- Trained and compared Linear, Ridge, Lasso, KNN, Decision Tree and Random Forest regressors against a null-model RMSLE benchmark using R^2 , MAE and 5-fold cross-validation; tree-based ensembles outperformed linear baselines.

EDUCATION

Master of Science (M.Sc.) in Information Technology

June 2023 – April 2025

The Maharaja Sayajirao University, Vadodara | CGPA: 7.04/10

Bachelor of Science (B.Sc.) in Information Technology

June 2019 – April 2022

P P Savani University, Surat | CGPA: 7.81/10