




# Madhusudan Bhukta

Backend Developer (Node.js Express MongoDB. Redis)

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## SUMMARY

Backend Developer specializing in scalable REST APIs, modular architectures, authentication systems, and high-performance backend engineering. Experienced with Node.js, Express, MongoDB, and Redis. Improved API latency, optimized data access patterns, and implemented production-style features such as caching, RBAC, and payment workflows. Learning SQL and Docker to deepen system-design capability.

## CORE COMPETENCIES

API Architecture • System Design Fundamentals • Caching Strategies • Error Handling • Performance Debugging • Query Optimization • Database Indexing • Scalable Folder Structures • Clean Code Practices • Deployment Workflows

## SKILLS

**Languages:** JavaScript (ES6+), TypeScript (learning), Python, SQL

**Backend:** Node.js, Express.js, REST API Architecture

**Databases:** MongoDB, Mongoose, Redis, MySQL (learning)

**Auth & Security:** JWT, Refresh Tokens, RBAC


**Backend Engineering:** Caching, Rate Limiting, Pagination, Indexing, Domain Modeling

**Tools:** Git, GitHub, Postman, MongoDB Atlas, Render, Vercel, Docker, Load Testing (Autocannon/k6)

## PROJECTS


### ShopNexus (E-Commerce Platform)

*Node.js, Express, MongoDB, Redis, Stripe*

- Improved product and category API latency by 35–60% using Redis caching and reduced redundant DB reads.
- Implemented JWT authentication, refresh tokens, RBAC, modular services, and full Stripe payment lifecycle.
- Designed domain models, implemented cache invalidation strategy, and performed load testing for system stability.
-  **Project Repository**


### LearnSphere (Learning Management System)

*React, Node.js, Express, MongoDB, Stripe*

- Built a full-stack LMS with role-based access control for Students, Instructors, and Admins.
- Implemented secure JWT-based authentication with cookie handling and session persistence.
- Integrated Stripe Checkout for course enrollment payments and order management.
- Developed course and lesson management with free preview access and dynamic enrollment logic.
-  **Project Repository**

### DevTinder (Matching Platform)

*Node.js, Express, MongoDB*

- Built user profile system, matching logic, secure authentication, and modular API architecture.
- Added database indexing to improve match lookup performance and query efficiency.
-  **Project Repository**

## EXPERIENCE

### Independent Backend Developer

**2024–Present**

- Built production-style backend systems with authentication, caching, and payment workflows.
- Improved API performance through caching, indexing, and optimized query patterns.
- Created middleware for validation, logging, error handling, and security.
- Performed debugging, load testing, and architecture refinement across multiple projects.

## TECHNICAL STRENGTHS

API Architecture • Error Handling • Caching Strategies • Performance Debugging • Data Modeling • Query Optimization • Deployment Workflows

## EDUCATION

**BCA (2024-2027)** — NIIS Institute of Business Administration, Odisha, India