SHUBHAM KUMAR

Software Development Engineer II

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SUMMARY

Backend Software Engineer with 4.5+ years of expertise building scalable, high-performance RESTful APIs and microservices using Node.js, Express.js, NestJS, and Go. Proven track record of optimizing system performance by 30%, mentoring cross-functional teams, and architecting secure backend solutions serving 15,000+ concurrent users. Expert in API development, database optimization, cloud infrastructure (AWS), and implementing CI/CD pipelines for enterprise applications.

SKILLS

Languages: JavaScript (Node.js), TypeScript, Go (Golang), SQL
Backend Technologies: Express.js, NestJS, REST APIs, GraphQL
Databases & Caching: MySQL, PostgreSQL, MongoDB, Redis, Query Optimization, Database Design, Indexing
Message Queues: Kafka, BullMQ, RabbitMQ
Cloud & DevOps: AWS (EC2, S3, Lambda, SES, API Gateway), Docker, Nginx, PM2, CI/CD, GitHub Actions
Testing & Quality: Jest, Test-Driven Development (TDD)
Security & Auth: JWT, OAuth 2.0, RBAC, Passport.js, Casbin, Session Management, API Security
Frontend: React.js, jQuery, EJS, Bootstrap, HTML, CSS
Additional: Git, Agile/Scrum, System Design, Performance Optimization

EXPERIENCE

Codebucket Solutions Pvt. Ltd. *March 2022 – Present*
Software Development Engineer II

- Architected and maintained RESTful APIs serving 100K+ daily requests with 99.9% uptime, implementing data validation layers and encryption protocols to ensure data integrity for 5M+ user records.
- Gained hands-on experience building backend services and APIs using Golang.
- Identified and resolved critical database query bottlenecks through strategic indexing and query optimization, reducing average API response time from 2.5s to 400ms and improving system throughput by 45%.
- Established coding standards and design patterns (SOLID, DRY) using ESLint and SonarQube, improving code maintainability and code quality. Separately, scaled the system from 10K to 15K concurrent users while boosting performance by 30%.
- Led 50+ code reviews implementing PR templates and automated testing requirements, improving code quality scores by 35% and reducing production bugs by 20%.
- Mentored and onboarded 7+ junior developers on Node.js best practices, RESTful API design, and testing methodologies, increasing team velocity by 20% and reducing onboarding time by 40%.
- Optimized backend API endpoints and implemented response caching with Redis, reducing average response time by 60% and improving frontend data loading efficiency by 25%.
- Designed and implemented secure authentication systems including role-based access control (RBAC), JWT tokens, and OAuth 2.0 using Passport.js and Casbin, securing APIs handling 50K+ daily authentication requests.

PROJECTS

Client projects delivered while at Codebucket Solutions Pvt. Ltd.

Xley - Influencer Marketing SAAS Platform xley.ai
Tech: Node.js, Express.js, Python, FastAPI, BullMQ, MySQL, Redis, Microservices, Docker, AWS

- Resolved backend code quality issues by fixing SonarQube violations, improving long-term maintainability.
- Integrated AI-driven campaign creation and AI-suggested influencer recommendations to improve automation and user experience.
- Added Firebase Analytics to track user activity and engagement for better product insights and decision-

making.
- Implemented multiple backend features and performance optimizations to improve scalability, reliability, and overall system efficiency.

Udyami Yojna Loan Management System (Bihar Govt.)
Tech: Node.js, Express.js, MySQL, Docker

- Re-architected legacy backend infrastructure using Node.js and Express.js, implementing input validation, parameterized queries, and JWT authentication to reduce security vulnerabilities by 30%.
- Designed and developed 25+ RESTful API endpoints with Swagger documentation and comprehensive test coverage (85%), reducing frontend development time by 40% through clear API contracts.
- Implemented automated data backup system and database migration scripts using Docker, ensuring zero data loss and reducing deployment time by 60%.

Rajaswa Karamchari Admin App (Bihar Land Revenue Dept.) Live Link
Tech: Node.js, Express.js, MySQL, Redis, jQuery, EJS

- Built scalable admin platform supporting 15,000+ concurrent administrators across Bihar Land Revenue Department with hierarchical role-based authentication (4 admin levels) using Passport.js.
- Optimized complex MySQL queries with joins on 40M+ record database through strategic indexing, query restructuring, and Redis caching layer, improving data retrieval speed from 8s to 2.5s (70% improvement).
- Developed real-time reporting dashboard with EJS templates and jQuery AJAX calls, processing 100K+ daily transactions with 99.5% uptime.

Bihar Minority Department's Loan Management System Live Link
Tech: Node.js, Express.js, MySQL, EJS, jQuery, Bootstrap

- Engineered dynamic EMI calculation engine with configurable interest rates, grace periods, and prepayment logic, reducing manual calculation errors by 50% and processing 1000+ loan applications monthly.
- Built comprehensive loan lifecycle management system handling application submission, approval workflow (5 stages), disbursement tracking, and automated payment reminders via SMS/email integration.
- Implemented audit logging and data encryption (AES-256) ensuring compliance with financial regulations and improving system reliability by 30%.

EDUCATION

Chandigarh University *2022 – 2024*
Masters in Computer Application, CGPA: 7.0/10.0

M.M.H.A.P.U, Patna *2017 – 2020*
Bachelors in Computer Application, Percentage: 72.17%