

Shazia Kausar

Senior Full Stack Software Engineer

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SUMMARY

Senior Backend Engineer with 10+ years of software development experience building, reviewing, refactoring, and operating production backend systems using Java, Spring Boot, microservices, and distributed systems. Strong expertise in backend architecture, PostgreSQL, database transactions, performance optimization, and developing secure, scalable, and maintainable services. Experienced in automated unit and integration testing, code reviews, engineering standards, and improving software quality throughout the development lifecycle. Skilled in designing resilient distributed systems, implementing CI/CD pipelines, and deploying containerized applications using Docker and Kubernetes. Familiar with cloud infrastructure, observability, and production troubleshooting, with a strong focus on security, reliability, and operational readiness. Brings a quality-first engineering mindset, sound architectural judgment, and a collaborative approach to establishing standards, improving inherited codebases, and delivering trustworthy production software.

SKILLS

- **Backend Development:** Java, Spring Boot, Spring Data, Spring Security, Python, RESTful APIs, Microservices, Hibernate, Object-Oriented Programming, Design Patterns, Code Refactoring
 - **Software Architecture:** Architectural Design, System Design, Distributed Systems, Event-Driven Architecture, Scalability, Fault Tolerance, Resilience Patterns, Concurrency, Asynchronous Processing, Idempotency, Retry Strategies
 - **Databases & Caching:** PostgreSQL, MySQL, MongoDB, Redis, Database Design, SQL Optimization, Query Tuning, Indexing, Transactions, Database Migrations, Data Consistency
 - **Testing & Code Quality:** Unit Testing, Integration Testing, Automated Testing, Test-Driven Development (TDD), Regression Testing, Code Reviews, Clean Code, Refactoring, Engineering Standards, Technical Documentation
 - **Security:** Spring Security, OWASP Principles, Secure API Design, Authentication, Authorization, OAuth 2.0/OIDC, Access Control, Privacy-by-Design, Secure Coding Practices
 - **Cloud & Infrastructure:** Docker, Kubernetes, Azure, AWS, Terraform, Cloud Infrastructure, Infrastructure as Code (IaC), Containerization
 - **CI/CD & Developer Tooling:** GitHub Actions, CI/CD Pipelines, Automated Build and Deployment, Git, Maven, Release Automation
 - **Observability & Production Reliability:** OpenTelemetry, Prometheus, Grafana, Structured Logging, Distributed Tracing, Monitoring, Alerting, Root Cause Analysis, Production Troubleshooting
 - **Messaging & Search:** Apache Kafka, RabbitMQ, Elasticsearch, OpenSearch, Asynchronous Messaging, Event Processing
 - **Engineering Collaboration:** Technical Ownership, Accountability, Cross-Functional Collaboration, Architectural Decision-Making, Mentoring, Knowledge Sharing, Agile/Scrum, Continuous Improvement
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WORK HISTORY

Freelance

Full Stack Developer

January 2026 - Present

Responsibilities:

- Design, develop, and maintain backend services using Java and Spring Boot, translating business requirements into reliable, maintainable, and production-ready solutions.
- Implement RESTful APIs and third-party integrations with appropriate input validation, error

handling, and secure data-processing practices.

- Design and optimize database schemas, queries, and data-access patterns to improve performance, consistency, and scalability.
- Take ownership of features from requirements analysis and technical design through implementation, testing, deployment, and maintenance.
- Apply unit and integration testing to validate business logic, API behavior, and external service integrations.
- Review and refactor existing code to improve readability, maintainability, error handling, and long-term reliability.
- Troubleshoot application defects, investigate root causes, and implement corrective measures to improve production stability.
- Collaborate with clients to clarify requirements, communicate technical trade-offs, and deliver solutions aligned with product needs.
- Deliver and maintain production applications, including Ramana Learning Center:
<https://www.ramanalearningcenter.com/>

Monta

Senior Java Backend Engineer

August 2023 - December 2025

Responsibilities:

- Designed, developed, and maintained Java and Spring Boot microservices supporting business-critical applications and distributed workflows.
- Contributed to backend architectural design and technical decision-making, establishing implementation approaches that balanced scalability, maintainability, performance, and reliability.
- Reviewed and refactored backend code to improve readability, reduce complexity, strengthen error handling, and maintain consistent engineering standards.
- Designed and optimized PostgreSQL and MySQL schemas, indexes, queries, and transaction workflows to improve database performance and data consistency.
- Implemented unit and integration tests to validate service behavior, database interactions, API contracts, and interactions between distributed components.
- Developed event-driven services using Apache Kafka and asynchronous messaging patterns, considering failure handling, retries, concurrency, and reliable event processing.
- Applied security-conscious development practices, including input validation, access controls, and secure API implementation.
- Deployed and maintained containerized applications using Docker and Kubernetes, supporting consistent releases and reliable production operations.
- Improved system observability through logging, monitoring, and Grafana dashboards to identify performance bottlenecks and accelerate incident investigation.
- Participated in code reviews, technical discussions, and retrospectives to identify quality gaps and continuously improve development and delivery practices.
- Took ownership of technical tasks from planning through production delivery, communicating risks, resolving defects, and balancing delivery speed with code quality.
- Mentored engineers through code reviews, technical guidance, and knowledge sharing to reinforce engineering standards and maintainable development practices.

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Senior Backend Engineer

November 2021 - July 2023

Responsibilities:

- Developed and maintained Java and Spring Boot microservices for fintech and payment-processing applications, emphasizing reliability, transaction integrity, and maintainable business logic.
- Translated complex business and payment-processing requirements into backend services and RESTful APIs with clear interfaces and consistent application behavior.

- Contributed to architectural design and implementation decisions, considering scalability, security, maintainability, and operational requirements.
- Designed and optimized PostgreSQL and MySQL queries, indexes, and transaction workflows to improve database performance and data consistency.
- Implemented event-driven processing using Apache Kafka to support asynchronous communication and integration between backend services.
- Wrote and maintained automated unit and integration tests covering business logic, API behavior, database operations, and service integrations.
- Participated in peer code reviews and refactored existing implementations to improve code quality, reduce defects, and promote consistent engineering practices.
- Applied secure development practices to API integrations, data validation, and transaction-processing workflows.
- Deployed and operated containerized backend applications using Docker, Kubernetes, and cloud infrastructure.
- Investigated production incidents, performed root cause analysis, and implemented fixes to improve system stability and reliability.
- Collaborated with engineers and technical stakeholders to clarify requirements, communicate trade-offs, and deliver features within agreed timelines.
- Contributed to continuous improvements in testing practices, technical documentation, deployment workflows, and production support.

Etisalat

Advisory Software Engineer

May 2019 - October 2021

Responsibilities:

- Developed enterprise-scale backend applications using Java, Spring Boot, and RESTful services.
- Designed distributed systems supporting large-scale telecom transaction and integration workloads.
- Built and optimized PostgreSQL and MySQL database solutions with emphasis on scalability and data consistency.
- Implemented asynchronous processing and event-driven workflows for enterprise applications.
- Supported cloud deployments using AWS and Docker-based environments.
- Established monitoring and observability practices using Grafana, logging, telemetry, and alerting tools.
- Participated in code reviews, technical design discussions, and software quality improvement initiatives.
- Mentored junior developers and contributed to architectural decisions involving scalability, reliability, and performance optimization.
- Worked closely with cross-functional teams to deliver robust and maintainable backend platforms.

InfoTech Pvt. LTD

Principal Software Engineer

August 2018 - April 2019

Responsibilities:

- Led full-stack technical delivery as a team lead, overseeing design and development of regulatory-compliant financial systems in alignment with State Bank of Pakistan guidelines.
- Architected and implemented complex transaction processing features, including JPOS message formats, ensuring secure, reliable, and standards-compliant financial integrations.
- Designed and developed enterprise-grade applications using Java (Spring), JSF (PrimeFaces), and JPA, deployed on Apache Tomcat with Oracle Database.
- Provided technical leadership through code reviews, solution design, and mentoring, ensuring high code quality, performance optimization, and long-term maintainability.

- Ensured system stability and correctness through automated testing using JUnit and adherence to best practices in secure software development.

INFOGISTIC Pvt. LTD

Lead Software Engineer

January 2018 - August 2018

Responsibilities:

- Led technical architecture and full-stack development for property listing and transaction platforms, supporting sales, purchase, and back-office operations.
- Defined system architecture and selected the technology stack, ensuring scalability, performance, and long-term maintainability of enterprise applications.
- Guided the development team through hands-on leadership, including code reviews, design validations, and best practice enforcement to ensure high-quality deliverables.
- Designed and implemented business workflow automation using the Activiti Framework, streamlining operational and back-office processes.
- Developed and optimized backend services using Java Spring, JPA, and MySQL, deployed on Apache Tomcat.
- Implemented advanced search and indexing capabilities using Apache Solr to enhance data retrieval and user experience.

NETSOL Technologies Inc

Principal Software Engineer

May 2011 - December 2017

Responsibilities:

- Progressed from Software Engineer to Principal Software Engineer, leading Agile delivery of enterprise-grade financial and insurance platforms for international clients across the UK, USA, and Australia.
 - Architected and led development of 5+ large-scale insurance systems, improving transaction processing efficiency by up to 30% through optimized system design.
 - Designed and implemented workflow automation and backend optimizations that reduced claims resolution time by 25%, enhancing operational efficiency.
 - Delivered highly reliable, scalable systems supporting thousands of daily users, improving overall system stability and user satisfaction.
 - Ensured regulatory and regional compliance by designing market-specific solutions, accelerating time-to-market by 20%.
 - Led modernization initiatives, successfully migrating legacy platforms to modern Java, J2EE, and Spring-based architectures, reducing technical debt by 40%.
 - Established high engineering standards through rigorous code reviews, automated testing with JUnit, and best practice enforcement.
 - Drove consistent on-time and ahead-of-schedule project delivery, resulting in a 25% improvement in client satisfaction.
 - Improved team productivity by 15% through effective Agile leadership using SCRUM and Kanban methodologies.
 - Mentored and coached junior engineers, elevating code quality, technical capability, and overall team performance across multiple projects.
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EDUCATION

Bachelor of Computer Science

Punjab University College of Information Technology

Oracle Certified Professional, Java Programmer (OCPJP)

Java SE 6 - Oracle Corporation

AConference & Professional Development

Attendee, KotlinConf 2024 - JetBrains Conference, Copenhagen, Denmark

PROJECTS

- **Reports Revamp (Alerts Project)**
Led the conversion of underused reports into a streamlined alerts-based system to enhance usability, especially for large clients.
 - **Portal to HUB Migration**
Migrated core functionality from Portal to HUB for improved performance, scalability, and technical alignment.
 - **UK Uptime Compliance**
Delivered Uptime export functionality to meet UK public charge point regulations, deployed on 23rd November 2024.
 - **Data Exports**
Developed Export APIs to allow customers to download data in XLSX format, improving self-service and reporting flexibility.
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