

Yash Ananta Zode

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SUMMARY

Experienced Software Engineer specializing in developing high-performance, scalable applications with expertise in Java, Spring Boot, Docker, and Kubernetes. Proven ability to design and implement REST/SOAP APIs, microservices, and cloud-native applications. Strong background in conversational AI, algorithms, and database optimization. Adept at integrating frontend (React, Redux) with robust backend solutions and leading CI/CD pipelines for rapid deployment. Passionate about delivering innovative solutions to complex problems, including conversational chatbots and cloud-based architectures.

TECHNICAL SKILLS

- **Programming Languages:** Java (Spring Boot, J2EE), Python, JavaScript, HTML5, CSS3, React, Redux, Angular
- **Microservices & API Development:** RESTful API design, SOAP-based API design, Spring Boot microservices architecture
- **Cloud Platforms:** AWS (EC2, S3, Lambda), Azure;
- **DevOps & Automation:** Jenkins, CI/CD pipelines, Docker, Kubernetes
- **Database Technologies:** Relational Databases: MySQL, PostgreSQL; NoSQL Databases: MongoDB
- **Frameworks & Libraries:** Spring Boot, Hibernate, Flask, Spring Framework
- **Testing & Debugging:** JUnit, Mockito, Automated testing, Performance debugging, SonarQube
- **Software Development & Design:** Algorithms, Data Structures, Design Patterns (Singleton, Factory, Observer), API Integrations
- **Async Messaging Systems:** RabbitMQ, Kafka
- **Monitoring Tools:** Prometheus, Grafana
- **Conversational AI:** Automatic speech recognition (ASR)
- **Version Control & Collaboration:** Git, GitHub, Bitbucket, JIRA
- **Soft Skills:** Analytical thinking, adaptability, cross-functional collaboration

PROFESSIONAL EXPERIENCE

Software Engineer | *University of Wisconsin-Milwaukee, Milwaukee, WI, USA*

Aug 2024 – Present

- Improved system functionality by integrating third-party APIs to enable real-time data synchronization, reducing data transfer delays across platforms by 30%.
- Delivered scalable applications by leveraging Multithreading and Exception Handling in Java, enhancing backend reliability by 25% during peak academic periods.
- Reduced downtime by 20% by implementing real-time monitoring and error tracking tools, enabling faster resolution of system-critical issues.
- Designed and implemented microservices-based architecture using Spring Boot, Docker, and Kubernetes, supporting a 30% increase in user traffic with consistent uptime and enhanced scalability.
- Spearheaded CI/CD automation with Jenkins and Kubernetes, optimizing deployment processes by 35% while ensuring system reliability for cloud-hosted services.
- Developed reusable backend components using Singleton and Observer design patterns, reducing technical debt by 15% and improving code maintainability.
- Achieved 90% test coverage with JUnit and Mockito, lowering production defects by 30% and ensuring reliable application performance.
- Collaborated with Agile teams to identify customer pain points, delivering tailored solutions and achieving a 95% project success rate.

Junior Software Engineer | *Cognizant Technology Solutions, Pune, India*

Nov 2022 – Aug 2023

- Engineered high-performance payment gateway systems with Java, Spring Boot, and RESTful APIs to support secure processing of over 2 million daily transactions, achieving 99.99% uptime. Engineered and integrated SOAP-based APIs to complement RESTful services, achieving compliance with Service-Oriented Architectures (SOA) standards and boosting cross-platform interoperability.
- Enhanced system security by deploying a two-factor authentication framework (Email OTP), reducing fraud rates by 15%.
- Enhanced backend performance by 20% by applying optimized data structures and multithreading techniques to improve real-time payment workflows.
- Streamlined interoperability between internal and external systems by designing and integrating SOAP-based APIs, improving system efficiency by 20%.
- Resolved 20+ production-critical bugs in Angular-based frontends, improving user experience and reducing downtime by 10%.
- Achieved 85% code coverage with JUnit and Mockito, reducing production defects by 30% during deployments.
- Integrated reusable backend components using design patterns like Singleton and Factory, improving scalability.
- Automated CI/CD pipelines with Jenkins, accelerating build and deployment workflows and reducing delivery time by 30%.

Junior Software Engineer | *Comau India Pvt Ltd, Pune, India*

Oct 2020 - Nov 2022

- Developed and deployed 20+ Spring Boot applications and RESTful APIs, supporting high scalability and meeting diverse client requirements.
- Boosted system performance by 25% by optimizing algorithms and data structures in Java, reducing response times and enhancing backend processing.
- Designed fault-tolerant backend services leveraging RabbitMQ, JDBC, and Multithreading, improving messaging reliability by 30%.
- Improved user experience by resolving frontend performance bottlenecks in Angular applications, reducing load times by 20%.
- Collaborated with frontend teams to develop reusable Angular components, enhancing cross-module integration and reducing development time by 15%.
- Integrated OPCDA and OPCUA servers with production systems, enhancing real-time communication reliability by 25%.
- Automated deployment pipelines with Jenkins and Docker, reducing deployment time by 30% and improving CI/CD workflows.
- Monitored systems using Prometheus and Grafana, ensuring 99.95% system uptime by enabling early detection and resolution of performance issues.
- Applied scalable design patterns like Singleton and Factory, reducing code redundancy by 15% and improving development efficiency.

EDUCATION

Master of Science, Computer Science | *University of Wisconsin-Milwaukee, Milwaukee, WI*

May 2025

- **Relevant Coursework:** Data Structures & Algorithms, Object-Oriented Programming, Software Development Lifecycle
- **Achievements:** Graduate Teaching Assistant, Awarded the Chancellor's Graduate Student Award

Bachelor of Technology, Computer Engineering | *University of Pune, Pune, India*

May 2020

- **Relevant Coursework:** Data Mining, Database Design, Computer Networks, Distributed Systems, Software Engineering
- **Achievements:** Engaged in peer teaching, mentoring fellow students in programming and software development concepts.

SELECTIVE PROJECTS

CloudEduTrack: Accessible Online Quiz Platform

- Led a cross-functional team to design and develop a voice-activated quiz platform with an Angular frontend and a Java Spring Boot backend, hosted on AWS and Azure, leveraging RESTful APIs to enhance accessibility for 95% of targeted users.
- Applied algorithms and data structures to optimize the voice-guided interaction workflows, reducing system latency by 20% and ensuring seamless user experiences.
- Crafted customizable user interfaces and integrated advanced voice recognition APIs, enabling voice-guided navigation and adaptable themes for users with motor and visual impairments, increasing user satisfaction by 40%.
- Deployed and optimized the platform on AWS and Azure using Docker and Kubernetes for seamless scalability, enabling conversational AI features like Automatic speech recognition (ASR) for accessibility and user interaction. Handled a 30% traffic increase with consistent 99.9% uptime.
- Developed reusable backend components using design patterns like Singleton and Factory, reducing code redundancy by 15% and improving maintainability.
- Collaborated with stakeholders and Agile teams to align deliverables with business requirements, enhancing project efficiency and achieving 100% on-time delivery.

Dynamic Pricing Engine for E-Commerce

- Designed and implemented a scalable data pipeline using Java, Spring Boot, and AWS to aggregate and process 100M+ records from sales, competitor pricing, and customer behavior, reducing data processing time by 40%.
- Developed RESTful APIs for real-time price updates across 1,000+ products, leveraging multithreading and efficient data structures, improving update speed by 35% and ensuring 99.9% system reliability through rigorous testing with JUnit and Mockito.
- Automated deployment workflows using Docker and AWS Lambda, reducing deployment time by 30% and maintaining latency under 200ms for real-time pricing calculations.
- Optimized backend architecture using microservices design principles, integrated machine learning models for dynamic pricing strategies, increasing pricing accuracy by 25% and driving a 15% revenue boost.
- Applied design patterns such as Factory and Strategy to build reusable components for pricing algorithms, enhancing code maintainability and scalability.
- Collaborated with cross-functional teams in an Agile environment to scope requirements, identify risks, and deliver the solution on time, aligning with business goals and technical constraints.

CERTIFICATIONS

- **Red Hat Certified System Administrator (RHCSA)** | Red Hat Enterprise Linux 8 | May 2019
- **Building Scalable Java Microservices with Spring Boot and Spring Cloud** | Google Cloud Training (via Coursera) | May 2020
- **APIs and Microservices Developer Certification** | freeCodeCamp | March 2020
- **Introduction to Cyber Security** | Swayam (IGNOU) | January 2020