Amruthbalu M

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EDUCATION

Bapuji Institute of Engineering and Technology   **Davanagere, Karnataka, India**
Bachelor of Technology in Electronics and Communication Engineering; CGPA: 7.51/10   *July 2018 – August 2022*

TECHNICAL SKILLS

Programming Languages: Core Java, Python, HTML, CSS, JavaScript.
Frameworks and DevOps: Spring Boot, Git, JIRA, ReactJS, Docker, Kubernetes, Jenkins, Microsoft Azure.
Cloud Computing: Proficient in Azure services, cloud computing platforms, and cloud infrastructure.
Database: PostgreSQL, MySQL, Windows, Linux, GitHub Actions (CI/CD).
Testing and Automation: Selenium, Playwright, Opkey, Postman.
Security: Spring Security, OAuth2, JWT, secure microservices architecture, data encryption, and secure session management.
Miscellaneous: Data Structures and Algorithms, Object Oriented Programming, System Design, Analytical and Problem Solving.

PROFESSIONAL EXPERIENCE

KPMG Global Services   **Bengaluru, Karnataka, India**
Associate Consultant   *Oct 2024 - Present*
- **Architected and implemented microservices-based systems** using **Spring Boot & Netflix Eureka Service Registry**, enabling efficient service discovery, fault tolerance, and inter-service communication.
- **Integrated Kafka for event-driven messaging**, optimizing asynchronous data streaming, reliable message delivery, and real-time processing across distributed services.
- **Deployed and scaled applications in Microsoft Azure**, leveraging cloud-native solutions, Kubernetes-based container orchestration, and CI/CD pipelines for automated deployment.
- **Enhanced API security and access control** through advanced configurations in **Spring Security**, implementing JWT authentication, OAuth2 protocols, and fine-grained permission management.
- **Led Agile/Scrum-based development**, driving effective team collaboration and streamlining project execution using **JIRA and Confluence**, with a strong focus on **active engagement and detailed System Design documentation**, ultimately enhancing efficiency and optimizing project outcomes.

KPMG Global Services   **Bengaluru, Karnataka, India**
Analyst   *Nov 2022 - Oct 2024*
- **Developed and optimized scalable RESTful web services** using **Spring Boot**, implementing efficient request handling, exception management, and API versioning for seamless backend functionality.
- **Integrated role-based authentication and authorization** with **Spring Security**, ensuring secure access control and user management across various application modules.
- **Designed and optimized relational database schemas** using **MySQL & JPA/Hibernate**, implementing indexing, caching strategies, and query optimization for improved data retrieval and persistence.
- **Conducted rigorous API testing and validation** using **Postman**, automating test workflows, analyzing performance bottlenecks, and ensuring reliable system interactions.
- **Designed and developed over 800 automation test scripts** for **Oracle ERP, Finance, and HCM domains**, utilizing **Java-based automation tools** such as **Selenium, Playwright, and Opkey** to ensure **rigorous and efficient testing workflows**.
- Built an automated framework for the scheduled processes module in Oracle ERP, enabling automatic extraction of report parameters and significantly enhancing efficiency.
- **Designed and implemented a reusable code solution for the Data Management module**, streamlining **package imports into the Microsoft Dynamics application**, resulting in a 40% reduction in manual effort and significantly improving operational efficiency.

PROJECTS

Microservices Architecture & Security Framework ⭘ | *Spring Boot, Spring Security, JWT, OAuth2, Key Cloak, Eureka*
- **Designed and implemented a microservices architecture using Spring Boot**, enabling efficient inter-service communication with **Feign clients** and **Netflix Eureka for dynamic service discovery**.
- **Configured and deployed an API Gateway**, centralizing request routing and enforcing security measures to safeguard microservice endpoints.
- **Implemented robust authentication and authorization mechanisms**, integrating **JWT-based security** and **Spring Security 6** for service-to-service and client-to-service access control.
- **Enhanced security model with OAuth2 and Key Cloak**, streamlining authentication management, securing APIs, and ensuring scalable identity provider integration.

Online Bookstore using Spring Boot ⭘ | *Spring Boot, Spring Security, Spring Data JPA, Eureka, My SQL, Swagger*
- **Developed a microservices-based Online Bookstore System** using **Spring Boot, Spring Cloud, Netflix Eureka, and Spring Security**, enabling dynamic service discovery, API Gateway routing, and secure user authentication.
- **Designed and implemented RESTful APIs** with Swagger UI for documentation, ensuring seamless inter-service communication and streamlined API exploration.
- **Integrated MySQL with JPA/Hibernate** for efficient data management, optimizing CRUD operations across **Book, Order, and Inventory services** while ensuring persistence and scalability.
- **Performed API testing with Postman** and deployed hosted documentation on GitHub Pages, improving reliability, debugging efficiency, and accessibility of technical resources.

Master DSA: Learning Platform ⭘ | *React, HTML, CSS, JavaScript, Router DOM*
- Developed a **React-based educational platform for Data Structures and Algorithms**, utilizing React Router DOM for client-side routing and React hooks (UseState, UseEffect) for state and lifecycle management.
- Implemented modular and reusable components for various DSA topics, structured with semantic **HTML5 tags and styled using Tailwind CSS** and custom CSS for a responsive, user-friendly interface.
- Enhanced user experience with dynamic animations and transitions using **Framer Motion**, ensuring smooth navigation and interactivity across the platform.
- Optimized performance and deployment using React Vite for fast builds and automated deployment to GitHub Pages with gh-pages.

CERTIFICATIONS

- Microsoft Certified: Azure Fundamentals (AZ-900)
- Java Foundations Professional Certificate by JetBrains
- Microservices Foundations Professional Certificate by Kong
- ISTQB Certified: Foundation Level
- Digital and Data Foundations – Artificial Intelligence and Automation