Karthik Siva

karthiksiva 1286@gmail.com | +91 6369788360 | Karthik's Portfolio | linkedin.com/KarthikSiva github.com/KarthikSiva

Skills

Languages: Java, JavaScript, TypeScript, SQL, HTML, CSS

Technologies & Tools: AWS (Lambda, SQS, DynamoDB, CloudWatch), Docker, Jenkins, Terraform, Angular, React, Node.js, Spring Boot, PostgreSQL, MySQL, PGAdmin, Git, GitHub, Bitbucket, Postman, Insomnia

Work Experience

Gavs Technologies, Chennai

Jan 2025 - Present

Java FullStack Developer

- Developed and integrated new features in a Spring Boot-based microservice application, enhancing business functionality and ensuring seamless interaction across distributed services.
- Optimized backend logic using data structures like Map, Set, and List along with algorithms such as sliding window and two-pointer, reducing time complexity and improving data retrieval efficiency from MySQL.
- Data Cleanup Automation: Developed a scheduled cron-based Lambda function to purge records older than 1 year from the MySQL database, improving data consistency and performance.
- AWS Serverless Development: Designed and deployed AWS Lambda functions using the Serverless Framework and Terraform for scheduled tasks via cron triggers to automate backend processes.
- Upgraded Spring Boot applications to the latest stable versions by resolving deprecated methods, replacing outdated dependencies, and ensuring backward compatibility.
- Designed secure REST APIs by implementing JWT-based authentication, enforcing token validation on each request and significantly improving the overall security posture of the application.
- Frontend Development: Built responsive and accessible UI components in React using Material UI, enhancing user experience and interface intuitiveness.
- Documented end-to-end test scenarios to support QA testing and executed load and performance testing using AWS CloudWatch and JMeter, ensuring system scalability and stability under peak load.
- AWS, SpringBoot, React, Node JS, Sonar, Jenkins, Docker, PostgreSQL, MYSQL, JavaScript, Junit, Terraform.

Fidelity Investments, Chennai

Oct 2023 - Oct 2024

Software Development Engineer

- API Development: Designed and developed RESTful API endpoints using Spring Boot, enabling seamless interaction between backend services and Angular frontend components.
- Frontend Development: Built intuitive and responsive user interfaces using Angular, enhancing user experience and optimizing UI performance.
- Security Implementation: Integrated Spring Security with JWT token-based authentication, generating and validating tokens for each API request to ensure secure and stateless communication.
- Authentication & Authorization: Implemented robust user authentication and role-based authorization, ensuring controlled access across the application.
- Backend Development: Developed scalable backend services using Node.js and TypeScript, improving system performance by 20% through code optimization and modularization.
- Data Structures & Algorithms: Utilized advanced DSA techniques including HashMap, List interfaces, Sliding Window, and Two-Pointer approaches to optimize logic and application performance. Leveraged Java Streams API for concise and efficient data processing.
- CI/CD Pipelines: Deployed applications using CI/CD pipelines with custom Jenkins pipeline stages, ensuring seamless integration. Managed the transition of environments from passive to active states, ensuring minimal downtime and maintaining application stability with rollback strategies
- Java, TypeScript, Jenkins, DynamoDB, MySQL, Node JS, Angular, Sonar, Karma and Jasmine.

Education

Rajalakshmi Engineering College, BE in Electronics and Communication Engineering

Sept 2018 - May 2022

• CGPA: 7.5/10

• Relevant Coursework: Object Oriented Programming, Databases, Data Structures and Algorithms.

Project Work

Job Portal github.com/JobPortal

- Built a full-stack job portal using the React.js frontend with JavaScript, the Java Spring Boot backend with Spring Security, JWT authentication, BCrypt password encryption, microservice architecture with separate service layers and role-based access control for Job Seekers and Employers.
- Created an optimized user experience with role-based registration and dashboards, persistent login sessions using JWT tokens, real-time feedback for all actions, protected routes with automatic redirects, dynamic content loading, and separate functionalities for job searching/application (Job Seekers) and candidate searching/job posting (Employers).
- Successfully delivered a secure, scalable job portal with enterprise-level JWT-based authentication, complete role-based authorization preventing unauthorized access, stateless session management for scalability, and seamless user experience that effectively connects job seekers with employers while maintaining high security standards and intuitive navigation for both types of users.
- Tools used: React, JavaScript, Java, Spring boot, MySQL.

Smart Data Storage System

- Worked on Spring Boot to create RESTful APIs to capture and process customer requests, Utilized AWS for secure and scalable data storage.
- Used Node.js to develop middleware and routing logic for integrating Spring Boot APIs with Angular services, ensuring efficient exception handling, status code management, and seamless data flow.
- Designed and implemented dynamic forms, interactive pages, and user-friendly interfaces to improve workflow efficiency. Added features to create tables in AWS resources and streamline data processing, enhancing overall usability and reducing unnecessary data consumption.
- This project ensures seamless integration between the front-end, middleware, and back-end services, providing robust application functionality. It significantly enhanced system scalability, improved user satisfaction, and optimized operational efficiency. By minimizing redundant data storage and optimizing resource allocation, it also contributed to cost savings and improved overall system performance.
- Tools used: Java, Angular, Node JS, SpringBoot, AWS.

Courses and Certifications

Java April 2023 – Sep 2023

• Certified in Java with expertise in object-oriented programming, data structures, and algorithm development. Gained hands-on experience in building scalable applications and showcasing skills in development and debugging through project assignments.

Web Development April 2023 – Sep 2023

• Completed a certification in web development with hands-on experience in building responsive applications using Angular, Node.js, HTML, CSS, and TypeScript. Demonstrated proficiency in front-end and back-end development, API integration, and scalable solution design.