Tharun Derangula

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EDUCATION

Masters in information technology   (January 2023 - May 2025)
- Kennesaw State University - GPA: 4.0/4.0

Bachelors in computer science and engineering   (August 2018- May 2022)
- Lovely Professional University - GPA: 3.9/4.0

PROFESSIONAL SUMMARY

- Experienced in full Software Development Life Cycle (SDLC) from requirements gathering to development, testing, and documentation.
- Extensive experience in Front-end, Back-end, and Full Stack Software Development.
- Experience in Test Driven Development, and Agile methodologies like SCRUM, and Kanban.
- Developed UI using Frontend technologies such as HTML, CSS, Angular (versions 2 to 12), and react.
- Extensive experience in JavaScript (ES6+), and Typescript for developing Front-end and back-end.
- Experience in State management, Store, and Asynchronous calls in components using Ngrx and Rxjs in Angular.
- Experience React hooks and Redux for state-management of components in React-based applications.
- Solid Experience in understanding Virtual DOM and Real DOM structure in UI rendering.
- Experience in various libraries in CSS like styled-components, material-Ui and emotion-styled.
- Expertise in developing a front-end library using Storybook for the reusability of components across applications.
- Solid Experience in writing unit tests and integration testing using Enzyme(react), Jest, Mocha, Jasmine, Mockoon Playwright, Cucumber, and Cypress.
- Developed the backend using Java (8,11) and implemented its features like Streams, functional interfaces, collectors, default methods, Sequential and parallel Stream.
- Expertise in Core Java with a strong understanding of Garbage Collector, Collections, Multithreading, Event handling, Exception handling, and Generics.
- Expertise in the design and development of multi-tier applications back-end using Java, Spring boot, J2EE, and Hibernate.
- Hands-on experience with Micro Services architecture using REST APIs in Java-Spring boot and NodeJS.
- Expertise in generating and consuming JSON-based RESTful web services with JWT security token and Spring REST API.
- Hands-on experience in design patterns such as Model-View-controller (MVC), Singleton design pattern, Factory Pattern, and Event-driven, web services such as RESTful.
- Hands-on experience in developing streaming services using Kafka for real-time data transactions across systems.
- Proficient in RDBMS (Oracle, PostgreSQL, MySQL) and NoSQL databases (MongoDB) with experience in database triggers, procedures, and PL/SQL.
- Experience in developing the ETL and ELT scripts to consume data from various sources.
- Experience in developing Apache Airflow Jobs for the scheduled run of services in the application.
- Proficient in using Amazon Web Services AWS and Extensive experience focusing on services like Lambda, S3, EC2, Cloud Watch, Cloud Front and Elastic Cache.
- Experience in Docker and Kubernetes to manipulate the container images and scale the microservices as needed.
- Proficient with build automation tools like Gradle, Maven, Jenkins, and Ant for builds and deployments.
- Experience with SonarQube to maintain code reliability, maintainability, and reusability.
- Experience with different IDEs such as VisualStudioCode, IntelliJ, Eclipse, and WebStorm.
- Deploy applications in Application Servers like Apache Tomcat, and Web Sphere.
- Experience with JUnit, Mockito, and Log4j in developing test cases and determining application functionality.
- Familiar with developing Grafana and Dynatrace dashboards to monitor the traffic of various services in the application.
- Extensive experience in debugging applications using Browser Debugger, Splunk, Kibana, and CloudWatch logs.
- Experience in UNIX/LINUX Shell Scripting and Deployment of Applications in Server.
- Solid Experience in using version control management tools such as GIT, Bitbucket, and GitLab.
- Closely worked with the Release Management Team in doing builds and deploying code into various environments like DEV/QA/UAT/Prod.
- Highly participated in code reviews, design architecture, and war-room for production issues.
- Experience in mentoring interns in the team for knowledge transfer, design guidance, and pair programming.
- Have excellent analytical, problem-solving, communication, and interpersonal skills, with the ability to interact with individuals at all levels and can work as a part of a team as well as independently.
- Experience in rewriting the legacy code into modern architecture using latest tech stack for front-end and back-end.

SKILLS AND PROGRAMMING LANGUAGES

- **Languages:** Java, JavaScript, TypeScript, Python, C, C++,
- **Databases:** SQL, MySQL, MongoDB, Oracle.
- **Front-end:** HTML, CSS, JavaScript, React, Angular, jQuery, Bootstrap, Redux, Jest, React Testing Library.
- **Back-end:** Node.js, Spring Boot, REST API, Express.js, Django, Docker, Kubernetes, AWS, AWS Lambda, Postman.
- **Other:** Data Structures, OOP, CI/CD, GIT, TCP/IP, Bitbucket, Kanban, Jira, Agile methodologies, SDLC, Linux, Jest, Junit.

EXPERIENCE

Software Engineer, Kennesaw State University, GA, USA   (August 2023 - Present)

- **Technology Stack:** React, TypeScript, Redux, Spring Boot, Spring Data JPA, PostgreSQL, AWS (EC2, S3), OAuth 2.0, JWT, Webpack, JUnit, Jest, Jenkins, Git.
- Built a full-stack healthcare management application using React and Spring Boot, implementing secure data flows and achieving 30% faster load times. Enhanced data privacy with OAuth 2.0 and JWT for secure authentication.
- Architected RESTful APIs with Spring Boot to streamline data flow between the front end and back end, enabling real-time updates and seamless data retrieval for healthcare provider and patients.
- Managed application state with Redux and integrated PostgreSQL using Spring Data JPA, ensuring secure, scalable data storage for patient information and medical records.
- Enhanced application performance with lazy loading, caching, and code-splitting via Webpack, significantly reducing load times for an improved patient and provider experience.
- Implemented secure user authentication and authorization with OAuth 2.0 and JWT, ensuring data privacy and HIPAA-compliant access controls for patient records.
- Conducted comprehensive unit and integration testing with JUnit and Jest, achieving high code coverage and ensuring robust and error-free application functionality.
- Configured CI/CD pipelines on AWS (EC2, S3) with Jenkins and Git for automated testing, deployment, and continuous delivery, improving deployment efficiency and application uptime.

Software Development Engineer, Walmart Global Tech India, India   (July 2022 – December 2022)

- Developed and maintained high-performance, full-stack web applications for Walmart's e-commerce platform, utilizing React for front-end development and Spring Boot with Node.js for back-end services.
- Designed and implemented RESTful APIs with Spring Boot to enable secure, efficient communication between front-end and back-end systems, supporting data consistency and rapid data exchange.
- Developed dynamic React-based UIs with reusable components, enhancing maintainability and consistency.
- Managed complex state with Redux to streamline data handling and enhance performance across various components, optimizing the user experience.
- Configured and optimized PostgreSQL databases to handle large volumes of transactional data, improving data retrieval times and supporting scalability for high-traffic scenarios.
- Implemented performance optimizations, including code-splitting, lazy loading, and caching strategies, to reduce load times and enhance overall application responsiveness.
- Automated testing and deployment with CI/CD pipelines in Jenkins, achieving 50% faster code integration.
- Conducted comprehensive unit and integration testing with Jest and JUnit, achieving high code coverage and ensuring stability and reliability in production environments.
- Employed best coding practices and adhered to Walmart's security and compliance standards, ensuring code quality and data protection across all applications.

Software Developer Intern, Walmart Global Tech India, India   (January 2022 - July 2022)

- Led the development of internal inventory management tools, enhancing warehouse efficiency and streamlining operations.
- Designed intuitive user interfaces with Angular, ensuring alignment with Walmart's design standards for a cohesive user experience.
- Developed back-end services using Python (Flask) for real-time inventory tracking, achieving a 15% reduction in data latency.
- Proactively troubleshot and debugged issues, enhancing application stability and minimizing software defects.
- Participated in code reviews and daily standups, contributing to a collaborative and agile development environment.

Software Engineer, Ebox, India   (May 2021 - August 2021)

- Technology Stack: React, TypeScript, Redux, Node.js, Express, MongoDB, PostgreSQL, AWS (Lambda, EC2, S3, RDS), Docker, OAuth 2.0, JWT, Webpack, Jest, JUnit, Jenkins, Git, Terraform.
- Designed and developed a comprehensive financial application with React and Node.js, delivering secure, real-time data processing for financial transactions and portfolio management.
- Built scalable RESTful and GraphQL APIs with Express and Node.js to streamline front-to-back communication, optimizing data retrieval and transaction handling.
- Architected a microservices structure deployed with Docker and AWS Lambda, enabling high resilience and scalability to handle substantial transaction volumes.
- Integrated MongoDB and PostgreSQL for high-speed data retrieval and secure, ACID-compliant storage, ensuring data consistency and reliability.
- Managed application state using Redux, facilitating seamless data flow and maintaining integrity across multiple interfaces.
- Strengthened security by implementing OAuth 2.0 and JWT for user authentication, achieving compliance with financial industry standards.
- Improved performance by leveraging caching, lazy loading, and code-splitting through Webpack, resulting in a 30% reduction in page load times.
- Conducted end-to-end testing with Jest for JavaScript and JUnit for Java components, achieving 90% code coverage and ensuring reliability for critical operations.
- Automated CI/CD with Jenkins, Git, and Terraform, enabling smooth, efficient deployments aligned with best practices for rapid, high-quality releases.