

Tharun Derangula

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EDUCATION

Masters in information technology

Kennesaw State University

GPA: 3.9/4.0

Bachelors in computer science and engineering

Lovely Professional University

GPA: 3.7/4.0

PROFESSIONAL SUMMARY

- Solid extensive experience in the **Software Development Life Cycle (SDLC)**, including acquiring business specifications, requirements analysis, design, development, testing, and documenting the functionality of the application.
- Extensive experience in **Front-end, Back-end, and Full Stack Software Development**, with a focus on building scalable, secure, and maintainable enterprise applications.
- Skilled in **Test-Driven Development (TDD)** and **Agile methodologies**, including **SCRUM** and **Kanban**.
- Proficient in **Angular UI development** using **TypeScript, HTML, CSS**, with expertise in **Angular versions 9, 12, 14, 15**.
- Extensive experience in **JavaScript (ES6+)** and **TypeScript** for both front-end and back-end development.
- Expertise in **state management** and **asynchronous operations** using **NgRx** and **RxJS** in Angular applications.
- Experience with **React hooks** and **Redux** for state management in React-based applications.
- Solid understanding of **Virtual DOM** and **Real DOM** structures for optimized UI rendering.
- Proficient in various CSS libraries such as **Material-UI, Styled-components**, and **Emotion-styled**.
- Developed reusable **front-end component libraries** using **Storybook** to ensure consistency and maintainability across applications.
- Hands-on experience in **unit testing and integration testing** using frameworks like **Jasmine, Jest, Mocha, Cypress, Playwright**, and **Cucumber**.
- Proficient in **backend development** using **Java (8, 11)**, with strong knowledge of features like **Streams, Functional Interfaces**, and **Parallel Streams**.
- Expertise in **Core Java** concepts such as **Garbage Collection, Collections Framework, Multithreading, Exception Handling**, and **Generics**.
- Skilled in designing and developing back-end solutions using **Spring Frameworks (Spring Boot, Spring Batch, Spring Web MVC, Spring AOP)** and **Hibernate**.
- Experienced in building **microservices architecture** and developing **RESTful APIs** using **Java-Spring Boot** and **NodeJS**, with secure communication using **JWT Tokens**.
- Hands-on experience in **Docker** and **Kubernetes** for containerization and orchestration, scaling services as needed.
- Proficient in setting up and managing **CI/CD pipelines** using tools like **Jenkins, Git, Bitbucket**, and **GitLab**.
- Skilled in working with **AWS services**, including **EC2, S3, Lambda, CloudFront, CloudWatch**, and **Elastic Cache**.
- Extensive experience with **RDBMS (Oracle, PostgreSQL, MySQL)** and **NoSQL databases (MongoDB)**, including creating triggers, stored procedures, and PL/SQL scripts.
- Developed and consumed **JSON-based RESTful web services** with efficient integration into enterprise applications.
- Proficient in **design patterns** like **Model-View-Controller (MVC), Singleton**, and **Factory Patterns** for scalable solutions.
- Experienced in using **Apache Kafka** for building **real-time streaming services** for data transactions.
- Expertise in maintaining code quality and reliability using **SonarQube** and ensuring adherence to coding standards.
- Skilled in using modern IDEs such as **Visual Studio Code, IntelliJ, Eclipse**, and **WebStorm** for efficient development.
- Deployed and managed applications on servers like **Apache Tomcat** and **WebSphere**.
- Debugged production issues using **Splunk, Kibana**, and **CloudWatch logs** to enhance application performance and reliability.
- Developed and managed **monitoring dashboards** using **Grafana** and **Dynatrace** to track service performance.
- Experienced in **Linux/UNIX Shell Scripting** and deploying applications on server environments.
- Collaborated with **Release Management Teams** to manage builds and deployments across environments such as **DEV, QA, UAT**, and **Production**.
- Actively participated in **code reviews, design architecture**, and **incident management for production issues**.
- Mentored team members and interns by providing guidance on **design patterns, code reviews**, and **best practices**.
- Demonstrated ability to **rewrite legacy systems** into modern architectures using the latest front-end and back-end tech stacks.
- Strong communication skills, with experience in **internal demos, technical presentations**, and effective stakeholder collaboration.
- Proven ability to handle **multiple tasks** in agile environments while delivering business-critical features.

TECHNICAL SKILLS

- **Languages:** Java, JavaScript, TypeScript, Python, C, C++,
- **Databases:** SQL, MySQL, MongoDB, Oracle, Snowflake, PostgreSQL
- **Front-end:** HTML, CSS, JavaScript, React, Angular, Ngrx, Rxjs, 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.

PROFESSIONAL EXPERIENCE

Software Engineer – Graduate Research Assistant | Kennesaw State University, GA, USA | August 2023 – Present

Technology Stack: TypeScript, JavaScript, Angular, React, Java, Spring Boot, Node.js, Redux, REST API, Microservices, AWS, Jest, Karma, Jasmine, Hibernate.

- Designed and developed a responsive and user-friendly application for the Accessibility Services Portal for the Kennesaw State University using **Angular, React, TypeScript, Java, Spring Boot, Node.js, REST API, Hibernate, Microservices, and AWS**.
- Built an intuitive **UI for professors and students** to manage accessibility requests using **Angular, React, and TypeScript**, ensuring a seamless user experience.
- Developed **scalable REST APIs** with **Node.js** and **Java Spring Boot** to integrate and retrieve data from various sources across the University System.
- Ensured compliance with **accessibility standards** such as **WCAG** by applying accessible design principles and using tools like **axe** and **Wave** for testing.
- Implemented **unit testing** and **end-to-end automation testing** using **Jest, Jasmine, Karma, and Cucumber**, ensuring the application's reliability and quality.
- Reduced **support tickets by 20%** by rewriting the legacy code into modern architecture using latest tech stack for **UI**.
- Collaborated with cross-functional teams to adopt **agile methodologies, CI/CD pipelines, and AWS services**, optimizing deployment and scalability.

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

Technology Stack: ReactJS, Redux Toolkit, TypeScript, HTML5, CSS3 (SCSS), JavaScript (ES6+), Java, Spring Boot, Hibernate, REST APIs, Kafka, Redis, MySQL, PostgreSQL, Docker, Kubernetes, Jenkins, Maven, Git, AWS (EC2, S3), CI/CD, React Hooks.

- Developed a **scalable, high-performance checkout system** using **Java, Spring Boot, Hibernate, ReactJS, Redux, TypeScript, and MySQL**, processing millions of transactions daily and improving API response times by 30%.
- Built reusable and modular **ReactJS front-end components** with **TypeScript, React Hooks, HTML5, CSS3 (SCSS), and Redux Toolkit**, ensuring responsive design and optimized load times.
- Designed and implemented scalable **RESTful APIs** with **Spring Boot** and **Hibernate**, integrated with **MySQL** and **Redis**, improving backend performance and reducing latency during peak transactions.
- Leveraged **Kafka** for asynchronous messaging to support real-time checkout processes, ensuring smooth communication between services.
- Deployed microservices on **AWS Cloud** using **Docker**, orchestrated with **Kubernetes**, and maintained **CI/CD pipelines** with **Jenkins, Maven, and Git**, automating seamless deployment workflows.
- Collaborated in Agile teams, using **JIRA** for task tracking, and drove end-to-end ownership of high-impact e-commerce features, delivering projects with high quality and efficiency.
- Followed best coding practices, participating in code reviews and maintaining high-quality standards for a robust and scalable codebase.

Software Developer Engineer Intern | Walmart Global Tech India, India | January 2022 – July 2022

Technology Stack: Java, Spring Boot, Python (Flask), Redis, PostgreSQL, Angular, TypeScript, RxJS, SCSS, Docker, Kubernetes, Jenkins, GitHub Actions, JUnit, Pytest, SonarQube.

- Designed and deployed **microservices** for real-time inventory management using **Java, Spring Boot, Python (Flask), Redis, and PostgreSQL**, reducing latency by 15%.
- Built responsive **Angular based user interface** with **TypeScript, SCSS, and RxJS**, enhancing usability and aligning with Walmart's internal design standards.
- Automated CI/CD pipelines with **Jenkins, GitHub Actions**, and containerized applications using **Docker** and **Kubernetes**, ensuring consistent deployments across environments.
- Participated in testing and debugging using **JUnit, Pytest, and SonarQube**, improving code quality and the tool's stability.

Software Engineer | Ebox, India | May 2021 – August 2021

Technology Stack: TypeScript, JavaScript, Angular, React, Java, Spring Boot, Nodejs, Ngrx, Rxjs, REST API, AWS, Jasmine, Cucumber.

- Developed a robust financial application** for Banking, Trading, and User Profile Management for a renowned financial company using **Angular, React, Typescript, REST API, Java, Spring Boot, Hibernate, Node.js, AWS, Docker, Jenkins, Kubernetes**.
- Developed seamless User Interfaces for Investor and Banking Users using **Angular, Typescript, React**.
- Improved performance and maintainability significantly by incorporating **Ngrx and Rxjs** for streamlined state management.
- Proficient in **Angular**, with hands-on experience working with versions 9, 10, 12, 13, 14 and **utilized JavaScript (ES6+) and Typescript** for UI Components in **React, Angular**, and back-end services using **Node.js**.
- Developed secured **Microservices** using **Node.js** and **Java with Spring Boot**, to fetch data securely and efficiently manage extensive data, ensuring reliability and performance.
- Implemented a Data Streaming service using **Kafka** for real-time data sync between various systems in Banking and Trading.
- Performed unit and end-to-end integration testing of applications using **JUnit, Mockito, Jest, Enzyme, Jasmine, Karma**.
- Developed **AWS Lambda functions in Node.js** to handle various serverless computing tasks, reducing infrastructure costs, and improving scalability, while utilizing **Docker** and **Kubernetes** to maintain containers and manage scaling as needed for service.
- Developed Datadog, Dynatrace, and Grafana dashboards** to monitor and set alerts for the traffic and performance of various microservices in the application.

ACHIEVEMENTS

- Achieved AWS Cloud Practitioner certification, emphasizing my proficiency in managing cloud services and infrastructure.
- As a GRA, mentored 150+ students in coding, debugging, and algorithmic problem solving, increasing satisfaction by 20%.