

Mark Jeremy Emmanuel Sagayaraja

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Summary:

A seasoned Software Engineer with 10 years of experience in developing and delivering high-impact software solutions for enterprise applications. Proficient in both front-end and back-end technologies, with a strong focus on building scalable, efficient, and secure systems. Adept at driving technical innovation, optimizing performance, and leading teams to deliver quality software that enhances user experience. Experienced in cloud computing, microservices architecture, and continuous integration/deployment pipelines. Proven track record in collaborating with cross-functional teams and stakeholders to deliver results on time and within budget. Passionate about leveraging modern technologies like Java, React, and cloud platforms (AWS, GCP) to solve complex business problems.

Skills:

Category	Technologies/Tools
Programming Languages	Java, Python, R, TypeScript, JavaScript, SQL
Web Technologies	HTML5, CSS3, JSP, jQuery, React.js, Angular.js, Node.js
Frameworks & Libraries	Spring Boot, Spring MVC, Redux, React Native, Shiny, Express.js
Cloud & DevOps	AWS, GCP, Kubernetes, Docker, Terraform, Jenkins, GitLab CI/CD
Big Data & Distributed Computing	Hadoop, Apache Spark, Pig Latin
Databases	MSSQL, DB2, MongoDB, PostgreSQL, MySQL, Hadoop HDFS
Testing & Automation	Selenium, JUnit, EasyMock, PowerMockito, WebDriverIO, Mocha, Chai, TestNG
Version Control	Git (GitHub, Bitbucket), SVN, Rational ClearCase
Business Intelligence & Analytics	SAS, PowerBI, Tableau, Custom Reporting Tools
Other Technologies	JWT, Apache Kafka, Swagger, Git, Maven, Gradle
Tools	Jira, Confluence, Rally, Bamboo, SonarQube, Grafana, K6, Jenkins, GitLab

Organisations:

Bendigo and Adelaide Bank – Software Engineer

(June 2022 to Present)

Description:

Online Internet Banking application for Bendigo and Adelaide Bank for over 2.4 million customers with the ability to manage their funds, accounts, payments, and other features. As a backend engineer, create new APIs to interact with different components within the bank and external providers to collect and present data for customers.

Responsibilities:

- Interact with business and stakeholders, to analyse and review business requirements, software requirements and non-functional requirements.
- Analyse feasibility of solution implementation and estimate effort for solution implementation.
- Analyse and understand all the various requirements and develop code in Typescript, SQL, GCP and AWS based technologies to meet those requirements as per established engineering and security guidelines and standards and document the involved steps.
- Perform testing through Manual testing and Unit tests covering all test scenarios to ensure robust software code and functionality.
- Assess and document all the software code added/modified and the impact it would have on the application including limitations and deficiencies.
- Provide development support and fix issues in various phases of testing like System Testing, System Integration Testing, Performance and Volume Testing, Security and Penetration Testing, User Acceptance Testing and Accessibility Testing as per established protocols.
- Handle incidents and tickets raised by customers and business and provide quick support or resolution.

John Deere – Lead Software Engineer

(May 2020 to July 2021)

Description:

A group of applications used for marketing programs including ordering parts, tracking and reporting, providing rich features for clients worldwide, a detailed and comprehensive view of their purchase history with various filters and statistical reports.

Responsibilities:

- Maintain a total of 11 software applications, with each one serving a different aspect of product sales information to various types of dealers.
- Interact with dealers and stakeholders to understand requirements and resolve them.
- Build end-to-end solutions for new change requests and technical issues.
- Guide and train team members through seminars and workshops on new technologies, methodologies and practices.

- Maintain all tasks in Rally, Confluence and other Agile support tools.
- Support monthly release cycles to ensure smooth delivery.

Edgeverve Systems Ltd – Technology Analyst

(June 2014 to April 2020)

Description:

A fully featured Internet Banking application which provides its customer with the ability to manage their funds, open new accounts, make payments, bills, cards, beneficiaries and various standard online banking features along with customer support. Worked on multiple features including implementing New Payments Platform for integrating real time payments, subscription for online statements, SMS/email notifications, customer feedback, reports generation, promotional interstitials, offline payments processing, ETL jobs for processing customer requests, rebuilding UI with React from scratch, etc...

Responsibilities:

- Interact with clients and business, to analyse and review business requirements, software requirements and non-functional requirements.
- Analyse feasibility of solution implementation and estimate effort for solution implementation.
- Analyse and understand all the various requirements and develop code in Java, J2EE and JavaScript based technologies to meet those requirements.
- Perform Unit Test by Manual and Automation Testing and JUnits and prepare Integrated TestPlans covering all test scenarios.
- Prepare Impact Assessment document which will describe all the software code added/modified and the impact it would have on the application.
- Provide development support and fix issues in various phases of testing like System Testing, System Integration Testing, Performance and Volume Testing, Security and Penetration Testing, User Acceptance Testing and Accessibility Testing.
- Implement Business analytics and reporting requirements.
- Maintain a good domain and code knowledge of all applications and infrastructure.
- Handle incidents and tickets raised by clients and stakeholders and provide quick support or resolution.
- Prepare Release Notes, Service support/handover documents prior to the release implementation.

Professional experience:

- Developed several new modular containerized back-end applications to incorporate a micro-service based architecture using kubernetes.
- Created cloud functions to process asynchronous event stream messages through Publisher/Subscriber Topics.
- Create, deploy and manage infrastructure using Terraform scripts for kubernetes external secrets, storage buckets, IAM roles, KMS key, Pub/Sub topics, cloud functions, service accounts and more.
- Implemented Java keystore, JWT, JWKS and related features for web service authentication and authorisation.

- Developed custom back-end frameworks using Java to enhance the product features.
- Developed several front-end pages including modals, interstitials, popovers, tooltips, etc. with dynamic content including transitions, animations, etc.. using JSP, JavaScript, Bootstrap, HTML and CSS.
- Experienced in front-end JavaScript frameworks such as React JS, Polymer JS and Angular JS.
- Experienced in Redux for React like to use two-way data binding, and redux-saga, redux- thunk for handling asynchronous events or intensive processes, etc...
- Experiences in using ReactJS components, forms, events, router, animations, etc..
- Experienced in Axios library for ReactJS to manage the XHR requests to other hosts system to fetch data.
- Familiar with JS libraries for ReactJS such as moment, formik, yup, jspdf, etc..
- Experienced in Java application frameworks like Spring MVC, Data, Data JPA and Boot.
- Migrated repositories from SVN to Git with preserved history.
- Built new test automation tool using Selenium.
- Debug Mainframe batch jobs and resolve issues in ETL process.
- Built solution using Apache Spark for high throughput data processing from multiple data sources.
- Evaluate and fine tune the performance of applications using Grafana K6.
- Create and maintain Jenkins and Gitlab build pipelines.
- Written Java Test classes using JUnit, EasyMock and PowerMockito frameworks and Automation test scripts on Node JS using WebdriverIO-Mocha, Chai frameworks.
- Experience in SQL features like CRUD operations, stored procedures, reports, sequences, etc.. and connectivity to the application through JDBC API and Hibernate.
- Created ETL jobs to perform tasks like reports and database operations.
- Worked on Java batches for processing various types of payments and other offline banking features.
- Converting images to BLOB and storing it in database for content management system.
- Experience in using Swagger utility to build and test web APIs.
- Experience in version control tools like Bitbucket, GitHub and Rational ClearCase.
- Experience in Agile SDLC, Build and Test tools for Continuous Integration/Continuous Development like Jira, Confluence, Bamboo, SonarQube, etc..

Education and Qualifications:

Master of Data Science - University of South Australia, Adelaide (2021 - 2023)

Bachelor of Technology – Electronics and Communication - Karunya University, India (2010 – 2014)