# SENTHILKUMAR SUBBAIAH

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## FULL STACK JAVA DEVELOPER PROFILE

### PROFESSIONAL SUMMARY:

Highly motivated and results-driven Java Full Stack developer with over 12+ years of industry experience in Financial Services, Healthcare, and Cloud Computing. Proficient in software analyzing, designing, developing, and delivering complex web-based applications using a wide range of technologies. Passionate about staying up to date with emerging trends and technologies in the software development industry.

- Experience in working in environments using Agile (SCRUM) and Test-Driven Development (TDD) methodologies.
- Experience in **Software Development Life Cycle (SDLC)**, Requirements Specification, designing documents and writing.
- Proven expertise in developing microservices using Spring Boot, Spring Cloud, and Netflix OSS components such as Eureka and Hystrix.
- Proficient in working with **Restful Web Services**, **Kafka**, **Zookeeper**, **and Docker** to ensure efficient and reliable communication between microservices.
- Experienced in building and deploying **RESTful** web services using standalone **Spring Boot** applications with **embedded Tomcat** server.
- Skilled in creating scalable and high-quality applications that meet business needs, and ensuring that they are efficient, maintainable, and secure.
- Experience using **Spring Cloud Config** for centralized configuration management across microservices.
- Experience of Netflix OSS components like Eureka for service discovery and Hystrix for fault tolerance and circuit breaking.
- Experience of **Spring Cloud Sleuth and Zipkin** for distributed tracing and monitoring of microservices.
- Experience with **Spring Cloud Stream** for building **event-driven microservices** using message brokers like **Kafka and RabbitMQ**.
- Hands on experience in using message brokers such as Active MQ and RabbitMQ.
- Experience with **Spring Boot Actuator** for monitoring and managing application health and metrics.
- Experience using Spring Boot starter dependencies, auto-configuration, and property files for simplified application setup.
- Experience of Spring Boot Data JPA for easy database access and manipulation using Java Persistence API (JPA) and hibernate.
- Experience with **Spring Boot Testing** for unit and integration testing of Spring Boot applications.
- Experience working with Docker, Kubernetes, Docker Swarm and Micro Services
- Created CI/CP Pipeline for **Docker** Build and Deployment

- Experience with container-based deployments using **Docker**, working with **Docker images**, **Docker hub and Docker registries**, installation and configuring Kubernetes and clustering them.
- Experience deploying Spring Boot and Spring Cloud applications on PCF (Pivotal Cloud Foundry).
- Experience of **PCF** features like built-in load balancing, auto scaling, and self-healing for highly available and scalable microservices.
- Experience with Security features like **OAUTH 2.0** and **API gateway** for secure microservice communication.
- Developed the single page application (SPA) using **Angular 6**, **Angular 8**, **Angular 11** which utilizes the classes, modules feature from JavaScript ES6 and typing feature from **Typescript**.
- Proficient in developing UIs using a wide range of technologies including Angular 8, Angular 11, React, Bootstrap, and jQuery while adhering to W3C Web Standards and ensuring browser compatibility.
- Expertise in various JavaScript frameworks such as Angular 8, Angular 11, React, and Bootstrap, as well as experience with other frameworks like EXTJS, DOJO, and NodeJS.
- Strong understanding and hands-on experience with Java 8 features, including lambdas, streams, functional interfaces, and default methods.
- Proficient in **multithreading** concepts and practical experience in building multithreaded applications, using **synchronized methods**, locks, and thread pools.
- In-depth knowledge of the Collection Framework, including Array List, LinkedList, HashMap, and Tree Set, and ability to choose the right data structure based on requirements.
- Expertise in building **RESTful** and **SOAP**-based web services, using JAX-RS, JAX-WS, and Spring Web Services frameworks.
- Skilled in writing unit tests using **JUnit** and **Mockito** frameworks, and experience in using Apache **JMeter** for load testing.
- Familiarity with JSON and XML data formats, and ability to parse and generate them using Java libraries such as Jackson and JAXB.
- Experience in using build tools such as **Maven**, and proficiency in creating and managing project dependencies using them.
- Expertise in working with various J2EE technologies including Hibernate, Struts MVC Framework, Servlets, JNDI, JMS, JDBC, AJAX, WEB SERVICES.
- Strong experience in Spring Framework such as **Spring MVC**, **IOC**, **AOP and Spring JDBC**.
- Proficient in DevOps process using Jenkins, JIRA, GIT, CHEF, and Automata tool for Continuous Integration.
- Also experienced in logging using Log4j.
- Strong understanding of database concepts, **RDBMS**, and **SQL programming**. Also experienced in NoSQL database such as **MongoDB**.
- Familiar with version control and configuration management tools like GIT and SVN and build automation tools like Ant and Maven.
- Extensive experience in testing on multiple operating systems, including Linux, Unix, Sun Solaris, and Windows.

## TECHNICAL SKILLS:

Programming Languages	C, C++, Java, SQL, PLSQL, Socket Programming
J2SE Technologies	Core Java, Threads, I/O, JavaBeans, JDBC, JSP, Servlets, JDBC, Hibernate
Web Technologies	JSP, Servlets, Spring framework (MVC/IOC/ORM/JDBC/AOP/WEBFLOW/Context), Spring Security, SSO, ISAM, SAML, EJB, JDBC, JavaBeans, Web Services, Angular 7, Angular 8, Angular 11 AngularJS, DOJO, EXTJS, Bootstrap, NodeJS, React, JavaScript, TypeScript, AJAX, jQuery, Bootstrap, HTML5, CSS3, SASS
Frameworks	Spring, Spring Boot, Spring Cloud, Struts, JSF, JPA, EJB, Hibernate and iBatis
XML Technologies	XML, XSL, XSLT, DOM, and JAXB
Other Technologies	IoT, IBM Bluemix
Databases	Oracle, MySQL, PostgreSQL, DB2, MongoDB, MS-Access, and Microsoft SQL Server
Web Servers	IBM WebSphere 8.5, Apache Tomcat, JBOSS, WebLogic
Development Tools/IDE	Eclipse, Net Beans, STS, IntelliJ, Visual Studio Code, IBM RAD
Build Tool	Ant, Maven, Gradle and Jenkins
Containerization Tools	Docker, Docker Swarm, Kubernetes
Debugging Tools & CI/CD	JIRA, Jenkins, CHEF (infra/habitat)
Operating System	Windows, UNIX, LINUX

## ACADEMICS:

- MCA (Master of Computer Application) from Mepco Schlenk Engineering College, Anna University (2010), Sivakasi, Tamil Nadu, India.
- BSC Spl.Physics from The American College, Madurai, Tamil Nadu, India.

#### **CERTIFICATIONS:**

- ✓ Oracle Certified Java Programmer
- ✓ IBM Cloud Developer Bootcamp

## ACHIEVEMENTS:

- Received Monetary **Recognition Award (2021)** as appreciation for my individual contribution towards the project delivery.
- Won the **First prize** in the **Ideation Contest (LEAP: Tools Month Event) (2016)** Innovative and Client implemented tool, "AppMan."
- Won the **Third prize** for **i2i** (**Inspire to Innovate**) (2015) ThenKoodu: IT Automation Framework (IAF)
- Received Monetary **Recognition Award (2014)** as appreciation for my individual contribution towards the project delivery.
- Won the **accolades (2014, 2015, 2016)** for the Excellence in Delivery of the critical tasks for 3 consecutive years.

## PROFESSIONAL EXPERIENCE:

Mar 2018 to present.

Mastercard, St. Louis, Missouri Full Stack Java Developer

## **Responsibilities:**

- Participated in **Agile Scrum methodology** and involved in Design, development, Implementation, and testing of the enterprise applications.
- Involved in Web application development for B2B (Customer Portal), B2C (Cardholder and Gift card Portal) using Angular 8, Angular 11, Mastercard's DXP framework, Angular CLI, NgRx, RxJS, Material, Bootstrap, TypeScript, Webpack, HTML5, SASS and CSS3.
- Involved in the development of cloud-hosted microservices-based REST APIs for B2B external/internal APIs using Spring Boot with embedded Tomcat.
- Worked on **B2C IVR** application using **VXML**.
- Integrated other backend System CAMS, Payment Manager, Base24, DCM, FRAUD and PEGA with B2B, B2C and B2B API.
- Migrating existing applications into microservices architecture using REST APIs, Spring Boot, Spring Cloud Config, Netflix OSS Components (Eureka, Hystrix).
- Developed and deployed microservices using Spring Boot and Spring Cloud, leveraging Netflix OSS components such as Eureka and Hystrix.
- Designed and implemented a scalable and fault-tolerant microservices architecture using **Spring Cloud Config Server** for externalized configuration management.

- Implemented distributed tracing using **Spring Cloud Sleuth and Zipkin**, enabling end-to-end visibility into the system's behavior and performance.
- Utilized **Spring Cloud Netflix** to enable service discovery and automatic load balancing across microservices instances.
- Developed and deployed **RESTful APIs** using **Spring Boot**, enabling seamless communication between microservices.
- Used **Spring Cloud Hystrix** for circuit breaking and fault tolerance, allowing the system to continue functioning in the event of a microservice failure.
- Created git repos and Jenkins jobs for the build and deployment of Microservices in **Docker Container.**
- Created Docker file for building **Docker Images.**
- Created script to build and push docker images in **Docker Hub**.
- Created **docker-compose.yaml** file templates to deploy images in docker containers managed by **Docker Swarm.**
- Worked in Angular 8, Angular 11 for developing Single Page Web applications using components, modules, services, directives, and routing using Typescript which meet the requirements of business model.
- Designed and developed responsive and scalable UI components using Angular 6, 8, 11 and Material Design.
- Created automated tests using **Jasmine** and **Protractor** to ensure the quality and reliability of web applications.
- Used NgRx Store for State Management to make Angular development easier by simplifying the application's state in objects and enforcing unidirectional data flow.
- Used various React component lifecycle hooks and NgRx for managing state in the B2B, B2C applications.
- Developed NgRx reducers, actions, effects, selector to manage state in the store.
- Used Angular Reactive forms to implement complex forms and performed the validations using Form Builder.
- Used various Mastercard's DXP, Bootstrap and Angular Material components such as Paginator, Chips, Modal Dialogs, Date picker, Calendars, Uploaders, Sliders, Alerts, and Card for developing the B2B and B2C UI.
- Consumed **REST Services** using Angular **HttpClientModule** and transformed the response using **RXJS** operators.
- Deployed B2B and B2C Angular Applications and REST services into Mastercard PCF Cloud using Jenkins.
- Implementing the new message retry mechanism using **Kafka** in the event of any failure in the downstream systems.
- Development of new listeners for producers and consumers for Kafka.
- Used **RabbitMQ** to facilitate communication between microservices in a distributed system.
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- Created Angular **HTTP Interceptors** to add necessary **JWT tokens** for the outgoing requests from UI, Loader Service, Custom Error Handling.
- Defined Angular routes using **Router module** for components at module level to enable lazy loading for modules and components.
- Worked with **RXJS** Observables and operators when working with **HTTP JSON responses** and defined custom error handler to handle error scenarios.

- Created Jenkins pipeline for B2B, B2C and B2B API PCF deployment.
- Worked on Cloud implementation by installing, building, and deploying applications using Cloud Foundry.
- Set up and configured Dynatrace integration on Cloud Foundry for Infrastructure Monitoring.
- Developed, implemented, and supported EAI based authentication in ISAM.
- Worked on various authentication and authorization technologies and protocols including SAML, OAuth and OpenID Connect.
- Created and injected **Spring Services**, **Controllers**, and **DAO**s to achieve **dependency injection** and to wire objects of business classes.
- Used **Spring MVC** to handle/intercept the user requests and used various controllers to delegate the request flow to the back-end tier of the application.
- Worked extensively on developing **Controllers**, **Interfaces and implementation classes** using **Spring MVC** framework & used **Microservice architecture** with Spring Boot based service through REST.
- Extensively worked on **Spring bean wiring, Spring DAO** a spring AOP modules and implemented Spring AOP in exception handling, which it reduces the development time to handle the exceptions.
- Experience in design and development of Web services, JAX-RPC, JAX-WS, RMI, JTA, JMS and XML, XSD, XSLT, X-Path.
- Used Java 8 features, including lambdas, streams, functional interfaces, and default methods.
- Used Collection Framework, including **Array List**, **HashMap**, and ability to choose the right data structure based on requirements.
- Used **Hibernate**, an **Object/Relational Mapping (ORM)** solution, to map data representation from MVC model to Oracle relational data model with an SQL-based schema.
- Set up the continuous Integration (CI) and continuous Deployment (CD) process for the application using Jenkins.
- Wrote build scripts using Maven. Used log4j to print logging, debugging, warning, and info statements.
- Worked on relational database design and writing SQL queries, stored procedures, views, and functions with **Oracle**.
- Used **JIRA tool** for issue/bug tracking and monitoring work assignment in the system.
- Developed, debugged, integrated, and deployed applications using Eclipse (IDE), STS.
- Utilized **Git for version control**, working collaboratively with a team of developers on a variety of projects.
- Implemented unit tests and integration tests using **JUnit and Mockito**, ensuring the quality and reliability of the code.
- Created and managed continuous integration and continuous delivery pipelines using **Jenkins**, enabling fast and frequent deployments to production.
- Collaborated with cross-functional teams, including product owners, designers, and QA engineers, to ensure the successful delivery of high-quality software products.

**ENVIRONMENT:** Java 8, 11 Spring Boot, Spring Cloud Config, Netflix OSS components (Eureka, Hystrix), Pivotal Cloud Foundry, Spring AOP, Spring JPA, Kafka, Zookeeper, Spring Security, RESTful Web Services using Micro services architecture, SAM, SAML, Hibernate, Angular 6, Angular 8, Angular 11, Material, Bootstrap, RxJS, NgRx, JavaScript, TypeScript, HTML5, CSS3, DHTML, Servlets, JDBC, Hibernate, XML, JSON, SOAP UI, Postman, Oracle 11g, 12c, TOAD, Eclipse, STS, IntelliJ, GIT, Bitbucket, Jenkins, Splunk, Remedy, Junit 4.9, Maven, Agile Scrum, JIRA.

Truven Health Analytics is an IBM Watson Health Company, Durham, North Carolina Chennai, Tamil Nadu, India Full Stack Java Developer

Dec 2017 to Mar 2018 Dec 2013 to Dec 2017

### **RESPONSIBILITIES:**

- Used Agile methodology and participated in SCRUM meetings.
- Involved in Design, Development and Support phases of Software Development Life Cycle (SDLC).
- Worked as a Full Stack Java Developer to develop web applications and webservices using Spring, Spring Boot, Spring MVC, Spring Security, Struts, SOAP, REST, Angular 7, Angular JS, DOJO, JavaScript, jQuery, AJAX, XML, JSON, JSP, Servlet, HTML5, CSS3.
- Involved in discussions with **Business Analysts** and **designed the TDD (Technical Design Documents)**.
- Involved in writing **Spring Configuration XML** files that contains declarations and other dependent objects declaration.
- Designed and documented **REST** APIs, including JSON data formats and API versioning strategy.
- Developed user interface using **Bootstrap** and Angular JavaScript to simplify the complexities of the application.
- Developed code for both server side and client-side implementations using Spring Web MVC, AOP and Dependency Injection.
- Implemented scripting with Ajax and XML to dynamically refresh the page contents and also Implemented JAXB in XML binding.
- Experience in Developing User Interface (UI) Rich Web Applications and Web Service Applications using **DOJO**, **ANGULARJS**, **BOOTSTRAP Framework**, **RESTful services**, **JAVA**, **JSP**, **HTML** 4, **XHTML**, **CSS** 2, **XML**, **AJAX**.
- Created Angular JS Controllers and Services.
- Called **REST** web services through **AngularJS** services to get JSON Object and modified the response object to display in UI.
- Experience with creating **Custom Directives**, **Decorators**, **and Services** to interface with both restful and SOA services.
- Implemented **Angular Router** to enable navigation from one view to the next as customer performs application tasks.
- Handled many of the errors for web page by using the **error handling features** over Angular
- Installed NodeJS and utilized the npm with Grunt for the build.
- Used spring framework and J2EE components, Utilized Spring MVC and DAO modules. Developed controller classes, backend processes, complex services and database interaction Added security for service layer methods using Spring Security.
- Experience in developing **Single Page Applications (SPA)** using **AngularJS**, using various angular modules like UI-router.

- Involved in the **JMS** Connection Pool and the implementation of publish and subscribe using Spring JMS.
- Used the **Rest Templates** in the spring services to call the rest web services.
- Used Web Services (SOAP & WSDL) to exchange data between portal and other modules.
- Created the spring Bean Factory for initializing services.
- Used **Hibernate**, **Object Relational Mapping** (**ORM**) solution, technique of mapping data representation from MVC model to Oracle Relational data model with a SQL-based schema.
- Involved in creating the Hibernate POJO Objects and mapped using Hibernate Annotations.
- Involved in writing Oracle PL/SQL Stored procedures, triggers, and views.
- Worked on **NoSQL** data base **MongoDB** and Performed CRUD operations like Update, Insert and Delete data
- Used Maven tool for dependency management and used Jenkins for continues integration.
- Extensively used the **Log4j** to log regular Debug and Exception statements and used JBoss as application server.
- Used Eclipse as development tool, Tomcat as application server, Git and SVN was used for version controlling.
- Wrote unit testing codes using **JUnit**, resolved bugs and other defects using Firebug.

**ENVIRONMENT:** Java 8, J2EE, Spring Framework 4.0, Spring MVC, Spring AOP, Spring JPA, Spring Security, Hibernate, AJAX, Oracle 11g, Web Services, Agile, REST, XML, SOA, WebSphere, JavaScript, Angular JS, Angular, Dojo, NodeJS, Bootstrap, JavaScript, jQuery, JBOSS, Tomcat, JUnit, Grunt, GitHub, SQL, JMS, HTML5, JSP, CSS3, MVC, Eclipse, Jenkins, Maven and SVN.

Novatium Solutions Pvt Ltd Chennai, Tamil Nadu, India Java Developer Nov 2010 to Dec 2013

## **RESPONSIBILITIES:**

- Involved in Design, Development and Support phases of Software Development Life Cycle (SDLC). Used AGILE methodology and participated in SCRUM meetings.
- Developed web interface for Users Modules using EXTJS, JSP, EXTJS, HTML, XML, CSS, JavaScript and AJAX with spring framework.
- Implemented User Friendly UI design with **HTML**, **CSS and JavaScript** for client-side validation and form submission functions
- Used spring framework for transfer the data from GUI to DB with Ajax framework.
- Designed user friendly navigation for displaying various sections of data using **jQuery**.
- Implemented **Spring IOC & AOP.** Extensively worked on Core Java concepts and expertise in **Collection** framework
- Developed business logic and Entity Beans to manage the transactions with the database to deliver the content to the presentation layer and to store the data into the data layer.
- Worked on file management, storage management and folder permissions.
- Programming in **Spring MVC** with bean configurations. Integrated the **File server with Nest server** using web APIs.

- Worked on Sync widget, Windows specific Sync implementation using HTML, JavaScript, jQuery, AJAX.
- Implemented chat application using NodeJS and Web socket.
- Integrated Zimbra mail server, Ejabber Chat server online, and Profiles using XML, LDAP
- Contributed to Messaging module, implemented http push Technology using Web socket
- Worked on YouTube widget, Content widget, Recommendation engine & Content profile.
- Used **JIRA** tool for Issue/bug tracking, monitoring of work assignment in the system.
- Involved in bug fixing, major releases and customization for various clients. Responsible for code reviews and design reviews.
- Provide technical solutions to various issues in project. Used **log4j** for debugging the application.
- Involved in Configuration of data source and deployment of application in development, Test and Production.
- **GIT** for version Controlling. Used **JUnit** test cases to test the application and performed random checks to analysis the portability, reliability, and flexibility of the project.
- Development processes the Scrum, Iterative Agile methodologies for web Application.
- Involved in configuration setting for Development, Test, and Production Environment.

**ENVIRONMENT:** Core Java, J2EE, Spring MVC, Hibernate, Design Patterns, SQL, Stored Procedures, Web Services, Agile Methodology, JSP, EXTJS, WebSocket, NodeJS, HTML5, CSS3, jQuery, JavaScript, AJAX, Bootstrap framework, GitHub, Oracle, PostgreSQL, XML, JSON, ANT, Tomcat, Eclipse, SVN Tortoise, SQL developer.

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