Professional Summary:

- Experienced software professional having 9 years of experience in the activities of analysis, design, development
- Experience in full System Development Life Cycle (Design, Development, Testing, Deployment and Support) using development methodologies Waterfall Process, Iterative Process and Agile (Scrum, TDD-Test driven development, CI-Continues Integration) automation test,
- Strong experience in Design and development of multi-tier web based applications using J2EE technologies JAVA, Servlets, JSP, Oracle, MySQL, and JDBC.
- Design, implement and test services in a Microservice-oriented architecture and has Implemented the REST based Microservices using the Spring Boot, Spring Data with JPA (Java Persistence API).
- Excellent design and programming skills in Java/J2EE, Struts, AWS, Spring3.x, Spring3.x (CORE, SECURITY, AOP-ASPECTJ, DAO, ORM, BATCH), Angular JS 2.0 Java Mail, EJB, Web services (SOAP AND RESTFUL, SAML Assertions, OAUTH2, HMAC), Servlets, JSP, JDBC, XML, XSD, XSLT, RMI, XML Parsers (DOM and SAX), JAXP, JAXB, Maven, Log4j, JUnit, Power Mockito, Java Beans, JNDI, SQL, PL/SQL, Oracle, Tomcat, JBoss, Sybase.
- Strong Programming Skills in designing and implementation of multi-tier applications using Java, J2EE, JDBC, JSP, JSTL, HTML, JSF, Struts, JavaScript, Servlets, JavaBeans, CSS, EJB, XSLT, JAXB
- Expertise in Core Java with a strong understanding of Object Oriented Concepts like Collections, Multithreading, Exception Handling, Polymorphism.
- Experience in **Web Services** Development using **RESTful, SOAP.**
- Expertise in Client Side Designing and Validations using **HTML**, **CSS**, **JavaScript**, **JSP**.
- Expertise in XML and schemas like XSD, DTD and parsers like JAXP (SAX & DOM) and JAXB.
- Knowledge on **eCommerce** platform development.
- Experience on application servers like **Apache Tomcat, JBoss, Web Logic & Web Sphere.**
- Experience in designing **User Interface (UI) applications** and professional web applications using **HTML**, **DHTML**, **XHTML**, **XML**, **XSL**, **XSLT**, **JQuery**, **D3.js**, **JSON and CSS**.
- Strong experience in Implementing MVC design pattern using Struts and Spring Framework.
- Having programming experience with **SQL**, **PL/SQL**, **Triggers**, **Functions**, **Stored Procedures**, **and Cursors** for the databases.
- Designed and Developed Representational state transfer (REST) based services and Simple Object Access
 Protocol (SOAP) based services as part of the requirement.
- Developed user interface components using JSP and tag libraries.
- Experience in development of rule engine or in complex event processing like JRules.
- Experience working on NoSQL databases such as MongoDB.
- Created AWS cloud formation templates to automate the process of launching custom-sized, EC2 instances, security groups, Cloud Watch, Cloud Front, RDS, S3, Cloud Trail
- Security measures that the cloud service provider (AWS) implements and operates security of the cloud
- Security measures that the customer implements and operates, related to the security of customer content and applications that make use of **AWS** services "security in the cloud"
- Created POJO classes and mapped with the Relations using **Hibernate** Mapping Files.
- Involved in writing the complex **SQL queries** and Procedures.
- Familiar with the use of **Angular.JS** and **TypeScript**
- Knowledge in programming languages like **Python, Scala**.
- Strong Knowledge in JavaScript Frameworks like React.js and Backbone.js
- Knowledge on stream based data processing architecture patterns and related technologies like Kafka,
 Spark.
- Used **Spring** Annotations for creating controllers, Services and DAO's.

- Knowledge in using **Pivotal Cloud Foundry** (PCF) CLI for deploying applications.
- Hands-on experience working with Continuous Integration (CI) build-automation tools such as Maven, SVN, CVS, Jenkins and Apache Ant.
- Experience with MySQL and MSSQL Server Database servers
- Having knowledge on **Apache Active MQ**
- Excellent understanding in installing and configuring **Oracle WebLogic Server**, Oracle SOA Suite 11g and **Oracle Service Bus**.
- Experience with Databases like **Oracle 10g/11g, MYSQL**.
- Experience of Database design in **Oracle/SQL Server/MongoDB** query based programming and PL/SQL procedure programming and proficient in Database programming using JDBC and SQL.
- Experience with web frameworks like **jQuery**, **Bootstrap**.
- Experience in generating user requirements for applications within an agile environment.
- Understanding of **Test Driven Development**(TDD).
- Designed and implemented a web application written in **Scala**.
- Working experience in **WebSphere**(WAS) or any other application server.
- Working knowledge in Messaging (JMS, MQ, WebSphere Message Broker is a plus.
- Used Continuous integration tools such as **Hudson**, **Jenkins** for deployment purpose.
- Implementing Service Oriented Architecture (SOA) with XML based Web Services (SOAP/UDDI/WSDL) using
 Top Down Approach and Bottom up Approach. Developed ANT scripts, and used Maven tool to build and deploy J2EE Applications.

Technical Skills

Web Technologies J2EE, XML1.0/1.1, XSLT, EJB1.1/1.2/2.0, JSP1.1/1.2, Servlets 2.0/2.3/2.4/2.5, Java (JDK

1.1/1.2/1.3/1.4/1.5/1.6/1.7), AWT, Java Beans, JMS, JNDI, JavaScript, HTML, Java Server Faces

(JSF), Hibernate, JDBC, SQL, WSAD, Web Methods.

Application Server WebLogic 8.x/9.x/10.x, JBOSS EAP 6.1, IBM Web Sphere 4.0/5.x/6.x, Tomcat7.0

Web Server Java Web Server 2.0, Apache Web Server.

Frameworks Struts, Spring, Hibernate, JQuery, Axis 2, Jersey, Apache CXF, CDI, Mule ESB

Languages JAVA, C, C++, Java script, UML, Microsoft VB

Databases Oracle 8.x/9i/10/11g Enterprise Edition, MS-SQL Server 2008/2005, DB2, MySQL

Tools Eclipse, MS-Office, Clear Case, Ant, TOAD 5.0/8.0, Maven, Rational Rose, RAD, IntelliJ IDE,

SOAP UI, Oracle SQL developer, Microsoft Visio.

Design Methodologies OOP, AOP, SOA, Design Patterns

Operating Systems Unix, Linux, Windows.

Version Control Tools: CVS, SVN, Clear Case, GIT, Serena Dimensions.

Project Experience

Client: Farmers Insurance, Woodlandhills CA

April 2016-Till date

Role: Java Full Stack Developer

RESPONSIBILITIES:

- Designed and developed applications using Agile Methodology.
- Responsible for requirements gathering, analyzing and developing design documents and reviewing with business.
- Worked as core technical team member for **analysis of requirements**, **design**, **development**, **unit and integration testing**.
- Extensively used Core Java API, Spring API in developing the business logic.
- Used **Spring Core** and the Inversion of Control module of **Spring framework.**

- Designed and Developed Representational state transfer (REST) based services and Simple Object Access Protocol (SOAP) based services as part of the requirement.
- Developed user interface components using JSP and tag libraries.
- Troubleshooting **Mule ESB**, including working with debuggers, flow analyzers, Message Sequencing, Correlation, and Queuing.
- Applied Integration patterns as per **SOA** architecture.
- Implemented web services **SOAP**, **REST** in **Mule** for DFS and ASOP respectively.
- Used Jenkins for CI (Continuous Integration) and CD (Continuous Deployment)
- Responsible for setting up **AngularJS** framework to achieve data binding between HTML and JavaScript, TypeScript objects.
- Implemented Programming Skills in designing and implementation of multi-tier applications using Java, J2EE, JDBC, JSP, JSTL, HTML, JSF, Struts, JavaScript, Servlets, JavaBeans, CSS, EJB, XSLT, JAXB
- Define and create Micro Strategy objects like attributes, metrics, filters, nested filters, hierarchies and relationship, templates and prompts
- Created AWS cloud formation templates to automate the process of launching custom-sized, EC2 instances, security groups, Cloud Watch, Cloud Front, RDS, S3, Cloud Trail
- Security measures that the cloud service provider (AWS) implements and operates security of the cloud
- Security measures that the customer implements and operates, related to the security of customer content and applications that make use of **AWS** services "security in the cloud"
- Used Oracle as database and Involved in the design and development of **PL/SQL** backend implementation.
- Used Java Messaging artefacts using **JMS** for sending out automated notification emails to respective users of the application.
- Used **JavaScript**, **AngularJS**, and **AJAX** technologies for front end user input validations and Restful web service calls.
- Developed reusable components using Custom Directives in **Angular JS**.
- Used **AngularJS** framework for building web-apps and is highly efficient in integrating with Restful services.
- Created web services and desktop applications to access and display data needed by support teams using JavaScript, JQuery, Angular. Js, Java, CSS and HTML.
- Developed applications using **AngularJS** single page applications SPAs to improve page performance.
- Implemented data-binding and MVC using **AngularJS** for front-end development of a current web application.
- Used Log4J to print info, warning and error data on to the logs.
- Implemented Maven Script to create **JAR**, **WAR**, **EAR** & dependency **JARS** and deploy the entire project onto the **WebLogic** Application Server.
- Developed Web services using Spring with REST API.
- Developed new business rules and enhanced the existing ones to meet client specifications using **JBoss drools**.
- Extensively used the J2EE design patterns like Session Façade, Business Object (BO), Service Locator, Data Transfer Object (DTO) and Data Access Object (DAO), Singleton, Factory.
- Used **Spring Core** Annotations for Dependency Injection and used **Apache Camel** to integrate spring framework.
- Designed and developed Web Services for building the middleware distributed components and deployed them on application servers.
- Implemented DAO layer using JPA (Hibernate framework) to interact with database.
- Performed Unit testing and Integration Testing.

- Configured local **Maven** repositories and multi-component projects and scheduled projects in Jenkins for continuous integration.
- Writing **Scala** classes to interact with the database and writing **Scala** test cases to test **Scala** written code.
- Developed integration techniques using the **Apache camel.**
- Designed and developed a **Restful APIs** for different modules in the project as per the requirement.
- Applied standard **Spring Boot** code structure layers Service, Rest to organize the project
- Implemented **Spring Boot** and **Spring Security** features.
- Developed Complex database objects like **Stored Procedures**, **Functions**, **Packages and Triggers using SQL and PL/SQL**.
- Responsible for writing the Design Specifications for the generic and application specific **web services** in **Groovy** on **Grails**.
- Designed and implemented a lead discovery web application using **Typescript**, **React JS**, **JavaScript**, **HTML**, **CSS**, **MVC**, and **Web API**.
- Experience in Oracle supplied packages, Dynamic SQL, Records and PL/SQL Tables.
- Used slick to query and storing in database in a **Scala** fashion using the powerful **Scala** collection framework.
- Created single Page Application with loading multiple views using route services and adding more user experience to make dynamic by using **Angular JS** 2.0 framework
- Used **Eclipse IDE** to develop/create my code in **java** and **groovy**.
- Created **Packages** and **Procedures** to automatically drop table indexes and create indexes for the tables.
- Worked with core java concepts like Collections Framework, Multithreading, Memory management.
- Designed and developed Microservices platform to support a multitude of enterprise level applications.
- Extensively used **bulk collection** in PL/SQL objects for improving the performing.
- Worked extensively on Ref Cursor, External Tables and Collections.
- Expertise in Dynamic SQL, Collections and Exception handling.
- Have extensive experience in building and deploying applications on Web/Application Servers.
- Supported the applications through **debugging**, **fixing and maintenance** releases.
- Responsible for updating the account and customer database if latest updates are available.
- Involved in writing the **JUnit** test cases as part of unit testing, used Mocking frameworks.
- Involved in **Units integration, bug fixing** and **User acceptance** testing with test cases.

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Environment: Java, J2EE, Restful Web Services, AWS, Microservices, Jenkins, SOAP Web services, Hibernate, Spring Core, Spring Data, Spring MVC, Spring AOP, Spring Batch, Spring Boot, Eclipse IDE, REST API AngularJS, JSP, JSTL, HTML5, CSS, JavaScript, WAS, Web Sphere, XML, XSD, Linux, UML, Groovy, Oracle 8i, 9i, 11g, Maven, SOA, Design patterns, JUNIT, log4J, WSDL, JSON, JNDI

Client: **TIAA, Charlotte, NC**Role: **Sr. Java/J2EE Developer**

March 2014- March 2016

Responsibilities:

- Understanding Existing System and working with the current Development teams to get the knowledge on the application.
- Participating in analyzing and developing various requirements for different business segments.
- Developed multi-tier web applications for internal users using **AngularJS**, **jQuery**, **HTML5**, **Java** and **SQL**.
- Created controllers use and services using **AngularJS**.

- Mule Server installation and configuration on Linux Box for UAT and Production stages.
- Deployed the applications on Mule ESB server.
- Designed, Developed and Deployed the Application on the AWS Cloud Environment
- Worked with the JavaScript frameworks HTML 5, CSS 3 and AngularJS.
- Automated some of the administration tasks through **Linux** scripting.
- Involved in coding, maintaining and administering servlets and **JSP** components to be deployed on a **Tomcat** application server.
- Developed secure web applications and server-side development using ORM, **Spring, AJAX, JSP, JSTL, Servlet, Java Beans, JavaScript, JSON, JQuery, HTML, Oracle, and** various Design Patterns.
- Developing SOA Composite Applications with Oracle SOA Suite
- Application developed using MongoDB (NoSQL Database).
- Used **Spring** Rest Controllers for implementing the **restful webservices**
- Developed applications using Java, JSP/Servlets, EJB, HTML, CSS, JavaScript.
- Designed, Developed, Installed **JMS** application to enabling a worldwide web application.
- Designed and Developed objects using Object oriented design in C++
- Applied standard **Spring Boot** code structure layers Service, Rest to organize the project
- Microservices have been built using Spring boot and deploying to AWS Cloud.
- Developed desktop interface using **Java Swing** for maintaining and tracking products.
- Managed substantial number of users in all **LINUX** servers
- Implemented the Model View Controller (MVC) framework, Struts.
- Designed and developed the UI using Struts view component, JSP, HTML, CSS and JQuery.
- Developed an Enterprise Resource Planning (ERP), Using Xml, JavaScript, Css3, Html5, XPath, Bootstrap
- Designed and developed a **Restful APIs** for different modules in the project as per the requirement.
- Developed XSLT adapters to convert XML files into formats that can be used by other internal systems
- Implemented UI components like Font Chooser, Color Chooser etc. using Java Swing.
- Implemented **Spring MVC** Controller module for better handling of client request, consume **Restful** data service and sending response back to client.
- Supported all the **UNIX** requests for various applications.
- Developed embedded **C** code, based on **Linux** OS.
- Managed MySQL and Oracle databases in Production, Test, Development
- Tested Service and data access tier using JUnit in TDD methodology
- Return **Shell scripting** to back up the application.
- Installed WebLogic/JBoss servers, configured domains for deploying applications.
- Installed, Configured and Maintained the WebLogic/JBoss and Apache webserver.
- Designed and developed Web Service using **Apache CXF**.
- Used **JUNIT** API for testing in a Test-Driven Environment (**TDD**).
- Developed **ESB** system using Java, **Apache Camel**, **Apache CXF**, **Spring** and **Hibernate**.
- Created and installed WebLogic Application servers, deployed WAR, JAR files on t servers.
- Worked on migrating the old java stack to Type safe stack using **Scala** for backend programming.
- Responsible for server coding, publishing webservices implemented for enhancements.
- Used **MAVEN** for build framework and **Jenkins** for continuous build system.
- Created Proxy's services and Business service using **Oracle Service Bus**
- configured and administrated **JBOSS** operations network enterprise monitoring and alerting tool for **JBOSS** Enterprise Application Platforms
- Customized **RESTful Web Service** using Spring **RESTful API**, sending **JSON** format data packets between front-end and middle-tier controller.
- Maintained multiple test and development MySQL instances
- Worked on **Apache Camel** for creating routes and transforming messages before firing the API's for increase performance.
- Used **Scala** collection framework to store and process the complex consumer information.

- Developed user interface by using the React JS for SPA development.
- Implemented client-side Interface using React JS.
- Resolving the Jars conflicts and dependency issues.
- Configured **Multi AZ environment** with AWS RDS instance in the Cloud.
- Used **Jenkins** as the **Continues Integration Tool** to build the project to Development, Test and production environments.
- Responsible for creating, testing and build the call flows for different voice applications.
- Responsible for monitoring call flow and data issues in voice applications.
- Responsible for the release Work Orders for the month/Quarter
- Developed SQL queries to interact with Oracle database and involved in writing PL/SQL code for procedures and functions.
- Preparing the detailed document mentioning all the changes during the development process and presenting the same to QA team.

Environment: Jenkins, Java, JSP 2.x, Struts 4, Servlets, Spring 3.o.4, Spring Boot, Kafka, Ajax, REST, Java Swing, JSON, Oracle 8i, 9i, 11g, Tomcat, Eclipse 4.2, Maven, Jenkin, Scala, Linux, MongoDB, AWS, Html, JQuery, Angular JS, JavaScript, CSS.

Client: Panasonic, Peach Tree City, GA

Aug 2012- Feb 2014

Role: Java Developer

Responsibilities:

- Responsible for application restoration and issue resolution, root cause analysis for problem recorded, provided fixes within agreed timelines
- Supported UAT teams to test fix for defect/ issue reported and responsible for HLD, LLD for change requests/enhancements.
- Designed and implemented the UI with extensive use of JavaScript, JSON and Ajax.
- Improved functionality by writing JavaScript and jQuery to manipulate data from APIs.
- Used **Hibernate** as an ORM tool for connecting to the database and accessing information.
- Extensively used agile development methodology and project planning.
- Identified the different back-end **EJB** component from front-end by addressing the seam name which we used as Seam2framework.
- Log4J is used for debugging process and application is built with MAVEN.
- Responsible for creating and managing users and group accounts and access privilege setting on **Unix/Linux** servers
- Developed the entire application implementing **MVC** Architecture integrating **JSF** with **Hibernate** and **spring** frameworks.
- Solved many Back end and business layer production issues and performance bottlenecks.
- Web application development for backend system using **AngularJS** with cutting edge **HTML5** and **CSS3** techniques.
- Developed the unit test cases using **JUnit**.
- Responsible for installing, configuring and introducing linux systems to the network
- Involved and improved the single page application using **Restful** web services and AJAX.
- Developed UI navigation using **Spring MVC**.
- Implemented Continuous Integration and Continuous deployment using various CI Tools like Jenkins.
- Used **Jenkins** as build management tool.
- Worked on **TDD** [Test Driven Development] environment.
- Used AJAX for interactive user experience and client-side validations.

- Developed the Application using Spring MVC Framework by implementing Controller, Service classes.
- Configured JDBC connection pools and data sources for **JBoss** server instances.
- Involved in writing **Spring** Configuration **XML** file that contains declarations and other dependent objects declaration.
- Performed **JBoss** server administration tasks like deploying applications, configuring JMS servers and **JDBC** data sources
- Developed user interface using **JSP**, **JSP** Tag libraries, **Spring** Tag libraries and **JavaScript** to simplify the complexities of the application.
- Used Spring Core for dependency injection/Inversion of control (IOC), and integrated frameworks like **Struts** and **Hibernate**.
- Wrote SPA (Single Page Web Applications) using RESTFUL web services plus Ajax and Angular JS.
- Responded to all **UNIX** systems problems 24X7 and resolved them on a timely basis.
- Develop batch processes for financial reporting applications and modules using Perl and Korn **shell scripts** on Oracle database, with partitions and sub-partitions.
- Followed **Agile** software development practice paired programming, test driven development and scrum status meetings.
- Created **SQL** Statement, Stored Procedure, and **PL/SQL** using **Oracle SQL** Developer.
- Used **HTML** to make changes on the UI based on the requirement.
- Configured WebLogic12application server and deployed the web components into the server.

Environment: Java, Maven, TestNG, Struts, Jenkins, Jira.J2EE 1.8, JSF 1.2, Spring, Hibernate, log4j, Oracle SQL developer, Angular Js, web logic server 12, Tortoise SVN, Agile Methodologies, Jenkins, JDBC, JSON, AJAX, XSLT, XML, JQuery.

Client: BJC Health Care, ST. Louis, MO

Oct 2011- Aug 2012

Role: Java Developer

Responsibilities:

- Maintained constant communication with Business Analyst and Business Users to identify information needs as per business requirements.
- Used **Spring** as middle tier application framework, persistence strategy using spring support for Hibernate and declarative transaction management
- All logic exposed via interfaces and practices of **Test Driven Development** followed consistently.
- Used Struts validator framework for client side and server-side validation. Also, implemented dynamic loading of JSP's using **AJAX**.
- Developed the database tier using **JDBC2.0** in **Eclipse** IDE. Also, the connectivity was made secure using the necessary validations
- Utilized **Hibernate** for Object/Relational Mapping (**ORM**) purposes for persistence onto the database.
- Extensively used **Spring IOC architectural** model to inject objects based on the selection of components like setter injection and Interface injection to manage the object references.
- Responsible for writing Hibernate Criteria and HQL queries.
- Used Java Messaging Services (JMS) for reliable and asynchronous communication
- Maven is used as a build framework.
- Used **Oracle 10g** as the backend database. Involved in creating the **SQL** scripts for the database. Used **Stored Procedures** in the application.
- Worked with production support team in debugging and fixing various production issues.
- Prepared **high and low-level design** documents for the business modules for future references and updates.

Environment: Java EE 7, Hibernate, Spring Framework, Maven 3.2.3, JSP 2.0, JAVA Script, HTML, CSS, Java/J2ee, spring, Apache Struts, Java Swing, JMS, RAD, WebSphere Application server, DB2, Clear case, Junit, AJAX,

JQuery, JSP, Servlets, Web Services (REST), Hibernate, Log4J, HTML, JavaScript, JQuery, XML/XSLT, AJAX, Json, ANT, CSS, MySQL, Web Logic 9.2 Windows XP, RAD.

Client: Intercontinental Hotels Group, Alpharetta, GA

Jan 2011- Sep 2011

Role: Core Java Developer

Responsibilities:

- Followed Scrum **Agile** methodology for project delivery.
- Developed Use case, Class and Sequence diagrams for major module.
- Developed web application using **JSP**.
- Used the JSP tags to write the business logic along with html tags in the webpage.
- Using the **JSP** from the webpage interacted with server-side resource.
- Involved in review of the software modules being developed and tested.
- Designed, developed and maintained the data layer using Hibernate and performed configuration of **Spring** Application Framework.
- Created web pages for each project using **HTML**, **CSS**, and **JavaScript**.
- **PL/SQL** Developer responsible for development, maintenance and documentation of object oriented database objects, as well as **UNIX SHELL** scripting and data management duties.
- Proficient in analyzing and translating business requirements to technical specifications
- Knowledge of usage centered design and/or interface design skills of a high order.
- Involved in Coding and testing.
- Testing of Web services using SOAP-UI.

Environment: Java EE 7, Hibernate, Spring Framework, Maven 3.2.3, JSP 2.0, JAVA Script, HTML, CSS

Client Nisum Technologies, India

May 2008 - Nov 2010

Role: Core Java Developer

Responsibilities:

- Designed and coded application components in an agile environment utilizing a test-driven development approach.
- Web services and maintained project tasks and schedules.
- Provided programming estimates, identified potential problems and recommended alternative solutions.
- Working with springs, Spring MVC, Struts and developed WEB Application using these frameworks.
- Implemented **RESTful** clients using **Spring** 3.2 Rest Template where Basic Authentication was a resolved using interceptor.
- Created web pages for each project using **HTML**, **CSS**, and **JavaScript**.
- Developed **RESTful** based Web Services using **JAXB**.
- Experience in working with IDE's like Eclipse, Spring MVC. Also, developed some web applications using spring, JSP and Servlets.
- Worked on developing the web services classes, **WSDL** using Apache Axis.
- Developed Web Services to retrieve data from legacy systems.
- Developed web services components using XML, SOAP.
- Developed and Deployed EJBs and other Components in the IBM Web Sphere Application Server 6.1
- Developed SOAP based Web Services using JAXB.
- Developed web components using **MVC** pattern under **spring framework**.
- Wrote JSPs, Servlets and deployed them on Web Logic Application server.
- Wrote Oracle PL/SQL Stored procedures, triggers, and views for backend database access.

- Used JSP's HTML on front end, Servlets as Front Controllers and JavaScript for client-side validations
- Web sphere used in create applications and integrate applications with other applications.
- Designed, developed and maintained the data layer using JDBC and performed configuration of JAVA Application Framework
- Developed and maintained Ant Scripts for the build purposes on testing and production environments.

Environment: JDK 1.6, J2EE, Spring Framework, Web Services (Soap and Restful), XML, Oracle, HTML5, CSS, Java Script

Professional Qualification

Bachelors in Technology from Anna University, Tamil Nadu, India-2008