PRAKYATH

Full Stack Java Developer

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PROFESSIONAL SUMMARY

8+ years of experience in Information technology and possess experience in designing, developing and deploying multi-tier web applications and client/server applications in **JAVA/J2EE** technologies using **Object Oriented Analysis** and **Design** and experienced in setting up **CICD** pipeline integrating various tools with **Jenkins** to build and run **Terraform** jobs to create infrastructure in **AWS**. Hands-on experience with an in-depth level of understanding in the strategy and implementation of **AWS** and **AZURE** cloud-specific technologies and microservices that includes **containerization** and **orchestration**.

- Involved in full software development life cycle and used **Waterfall**, **Agile** and **Test-Driven** Development methodologies in development.
- Efficient in **Core Java**, **Spring Framework**, **Spring Boot**, **Spring MVC**, **JPA**, **Hibernate, Multi-Threading** and **Spring Rest** and in client-side Technologies such as **React.js**, Object Oriented **JavaScript** and **Typescript**.
- Designed and developed Microservices and experience in developing enterprise applications based on the **J2EE** platform using open sources like **Spring**, **Hibernate** and **Struts** frameworks.
- Implemented **Java 8, 11** features like stream, lambda expressions, functional interface, collections, Date/Time changes and type annotations.
- Developed and implemented **SOAP/RESTful** web services using **SOAP**, **WSDL**, **Axis2**, **Apache CXF**, **Spring Rest** and deployed using **Tomcat** web application server.
- Designed and developed **GUI** responsive web applications by using various technologies like **HTML5**, **CSS3**, **JSP**, **JavaScript**, **Query**, **JSON**, **Ajax**, **Angular.js**, **React.js**, **TypeScript** and **Bootstrap**.
- Deployed several **J2EE** Application archives (**Jar, War and Ear**) on **JBoss Application Server**, **Web Logic Application Server** and **IBM Web Sphere application server**.
- Used **IDEs** like **Eclipse**, **RAD**, **IntelliJ**, **Spring Tool Suite** and **Visual Studio code** in development. Developed design patterns like **MVC**, **Singleton**, **Front Controller**, **Data Access Object** and **Business Delegate**.
- Skilled in writing **stored procedures**, developing **functions**, **views**, and **triggers** to analyze data and using **SQL queries**.
- Handled **XML** and related standards, technologies like **SOAP**, **WSDL**, **XSD**, **DTD**, **XSL**, **DOM**, **SAX**, **XSLT**, **HTML** and **DHTML** applications over **Windows**, **UNIX** and **LINUX** operating systems.
- Incorporated Relational Database Management Systems including **Oracle**, **MySQL**, **DB2, PostgreSQL** and **MongoDB**.
- Implemented Test Driven Development (**TDD**) and worked with **Junit**, **Mockito** for unit testing and Integration testing of the applications using **Selenium** and behavioral testing using **Cucumber.**
- Employed various version control management tools like **GIT**, **Bitbucket**, **SVN** and **CVS** and used defect tracking tools like **JIRA**, **Rational Clear case, Quality Center.**
- Provided build scripts using build tools such as **ANT**, **Maven**, **Gradle** and used logging framework **Log4J** in tracking and debugging the application.
- Excellent customer service abilities, the desire to execute duties quickly and effectively and the capacity to interact with all levels of management and the client community successfully.
- Experience with Cloud Computing Service environments like (**AWS**) Amazon Web Services and **Azure** based on compute, data or security requirements. Profoundly adept at completely acing new innovations.

TECHNICAL SKILLS

Languages/ **Web Technologies**	Java, J2EE, JavaScript, TypeScript, PL/SQL, SQL, HTML5, CSS3, Ajax, Bootstrap, XML, AngularJS, Node.js, JSP, JSON, React.js, jQuery, Vue.js, Ext.js, Python, Machine Learning, NLP
Application Frameworks	Spring, Spring MVC, Spring AOP, Spring Boot, Servlets, Struts framework, Hibernate, Apache Camel, JPA, Drools, JAX-WS, JAX-RS - Restful Services, Rest Easy, Log4j
J2EE Technologies	JSP, Servlets, JDBC, JUnit, Web Services, Multi-threading
Frameworks	Spring Core, Spring MVC, Spring ORM, Hibernate, Struts
Distributed Technologies	SOAP/ Restful Web Services, JMS, Microservices, Kafka, Perl Shell, Korn Shell
XML Technologies	XML, XSL, DTD, DOM, SAX, JAX-RPC, SOAP, WSDL
Application Servers	Apache Tomcat, WebSphere, Web logic 9.1/8.1, JBoss
Containerization/ Orchestration	Docker, Kubernetes, Openshift4
Unit Test Frameworks	JUnit, Mockito, Cucumber, Selenium, Jasmine, Karma, Easy Mock
Databases	SQL Server, PostgreSQL, Oracle 11, MYSQL, MariaDB, MongoDB, DB2, Sybase
IDE	Eclipse, Spring Tool Suite, Visual Studio Code, Sublime Text, Text Pad
Tools	RSA, RAD, Maven, ANT, JUnit, Log4j, E2E logger, Gradle, JIRA, Splunk, Dynatrace
Documentation Tools	MS Word, Swagger, Confluence
Operating Systems	Windows, LINUX, UNIX
Methodology	Agile - Scrum, RAD, Waterfall
Version Control Tools & SCM:	CVS, SVN, Git, GitLab, Bitbucket, Azure repos, Gitlab
Cloud	AWS, Azure
CICD	Jenkins, Team city, Cloud Bees
Code Analysis & SAST	SonarQube, Veracode, Nexus IQ, Checkmarx, Black Duck
API Test Tools	Postman, SOAPUI
Ticketing Tools	JIRA, Service Now, Orange County

PROFESSIONAL EXPERIENCE

Client: TIAA, North Carolina
Team Name: Blue Ridge
Duration: Feb 2023 – Present
Role: Sr Full Stack Developer

Description: TIAA TODAY is a web application, which is used by business partners and customers and it display's all the data gathered from multiple data sources including call queues by running ETL Jobs maintained by **TIAA-DAE** web application. **TIAA DIGITAL** is a web application which holds aggregated data collected from multiple data sources which are used by cross functional teams and maintained by **TED-DAE** web application by running ETL Jobs.

Responsibilities:

Production Support:

- Oversaw and maintained five diverse applications, providing consistent production support. Identified inefficiencies in on-prem infrastructure and migrated data workflows to **AWS Cloud**, reducing hardware expenses by **40%** and improving system efficiency by **30%** through optimized security and scalability.

Password Management:

- Led the integration of **CyberArk** for **secure password management** across applications, addressing potential unauthorized access risks. Established secure connections, reducing security incidents by **25%** and ensuring streamlined account management across the team.

ETL Design & Implementation:

- Automated manual data extraction processes by implementing **ETL** job scheduling, significantly reducing time spent on manual tasks and creating real-time data workflows that populate dashboards for immediate insights.
- Conducted performance tuning and memory optimization for **Python** scripts running on **Linux**, leading to a **30%** increase in **ETL** pipeline speed.
- Implemented **Quartz Scheduler** for ETL jobs using **Spring**, adding automated email alerts for failures. This improved job monitoring by **30%** and reduced response times for error handling, ensuring consistent data availability.

Front-End Development:

- Enhanced frontend application performance by optimizing data fetching strategies and migrating to **React**, improving user engagement by **45%**. Designed and developed responsive UI components using React and **Bootstrap**, ensuring consistent user experience across all devices.
- Implemented API integration in **React** using **fetch** and **axios** to streamline data retrieval, reducing data loading times by **30%**. Leveraged **React Router**, hooks like **useEffect**, and state management to enhance component functionality and maintain a dynamic user interface.
- Designed and maintained a large-scale, real-time application using **Node.js** and **TypeScript**, handling over **500,000** concurrent users with minimal downtime.
- Designed single-page applications using **VueJS** with **Vuex** for state management, improving data interaction and user experience by **25%**. Built custom APIs for data handling and implemented two-way data binding to synchronize real-time updates efficiently.

Back-End & Restful Web Services Development:

- Led the architectural design of a large-scale application using **Spring MVC**, configuring endpoints and integrating **REST** services. Delivered a seamless end-to-end application development process by coordinating service calls across microservices.
- Improved application scalability and performance by implementing **Spring Core**, **Spring Data**, and **Spring Security**. Used **Hibernate** for seamless data persistence, reducing response times by **30%**, and applied **Object-Oriented Programming** principles to structure complex business logic efficiently.
- Developed Java frameworks using **lambda expressions** and **multi-threading** to handle high-volume data processing more efficiently, reducing processing time by **50%** and improving overall application performance.

Microservices Architecture & Development:

- Transitioned a monolithic architecture to **microservices** using **Spring Boot** and **RESTful** services, improving modularity and reusability of code. Leveraged **Spring Core** Annotations for dependency injection, reducing code complexity by **40%**, and ensured smoother **API** integrations with **Spring MVC**.
- Implemented microservices architecture in **Node.js**, decreasing deployment time by **25%** and improving scalability by breaking down monolithic applications into modular services, enhancing maintainability across teams.
- Utilized **Web Client** in **Spring Web Flux** for asynchronous and non-blocking communication with external APIs, improving **API** response time by **25%** and streamlining integration between **microservices**.

Testing and Validation:

- Increased code quality and coverage to **90%** by developing comprehensive **unit tests** with modern frameworks such as **JUnit** and **Mockito**, reducing production defects by **50%** and enhancing the reliability of services.

Dashboard Design and Maintenance:

- Worked **cross-functionally** to design **dashboards** that provided real-time visual insights, improving decision-making speed by **25%**. Collaborated on data visualization and reporting based on specific business requirements, enhancing productivity.
- Configured **call queues** and developed custom dashboards using **Genesys Loader** and **ExtJs**, pulling data from Genesys to improve operational insights. Used **Dynatrace** to monitor and enhance the performance of applications and infrastructure.

Caching & Security:

- Improved application performance by implementing **caching** with self-cache clearing mechanisms. Built a UI-based cache admin tool that allowed manual cache clearing, reducing application load times by **35%** during peak usage.
- Implemented **Single-Sign-On** (SSO) using **Ping Access** and **PingFederate**, improving authentication flow for protected applications. Integrated Spring Security for role-based authorization, increasing user login security by **30%**.

NLP & Machine Learning:

- Designed and implemented **machine learning** pipelines to analyze customer reviews, utilizing **supervised learning** algorithms for sentiment classification and feedback categorization deployed **RESTful Flask APIs** to expose machine learning models.
- Integrated **Python**-based **machine learning** pipelines with **Flask APIs** to preprocess text data through **tokenization**, **stop-word removal**, **stemming**, and **lemmatization**, ensuring clean and structured input for **model training**.
- Leveraged **NLP** techniques like **TF-IDF vectorization**, **word embeddings** (**Word2Vec**, **Glove**), and **BERT** transformers to extract meaningful insights from customer reviews.
- Implemented a sentiment analysis pipeline using Python libraries such as **NLTK**, **spaCy**, and **Scikit-learn**, achieving an accuracy of **99%** in classifying reviews as positive, negative, or neutral.
- Leveraged **Flask API** for seamless data exchange between the machine learning backend and a dashboard, visualizing customer sentiment trends and feedback insights by stakeholders.
- Created secure and scalable **APIs** to handle concurrent requests, incorporating token-based authentication to ensure data privacy and integrity.

Build Tools and Scripting:

- Streamlined system administration tasks by combining **Unix shell** commands with **Perl Shell** (psh), reducing complex data processing time by **25%** and improving the efficiency of recurring system tasks.
- Converted all build processes from **Maven** to **Gradle**, improving build speed by **40%** and ensuring seamless containerization and pipeline compatibility during application deployment.
- Utilized **Python** libraries such as **Pandas** and **SQL Alchemy** for data manipulation and transformation within **ETL** processes, improving data integrity and processing efficiency.

Migration to OpenShift AWS & Deployment:

- Migrated all on-prem applications to **OpenShift-4** containers, containerizing from scratch and deploying in production. This reduced deployment failures by **50%** and improved system scalability for future feature updates.
- Worked with **IAM** to develop new account management systems, creating roles, groups, and policies to ensure secure resource management. Developed modules that integrated with **S3**, **DynamoDB**, and **Lambda**, optimizing resource provisioning.
- Implemented a serverless architecture with **API Gateway**, **Lambda**, and **DynamoDB** to scale application functionality without managing infrastructure, reducing operational costs by **25%**. Deployed **AWS Lambda** code with automated triggers from **S3**.
- Reduced deployment times by **60%** and improved system reliability by automating **Docker image** builds and deployments

using **Jenkins** (**Cloud Bees Pipeline**). Established a continuous integration process, cutting downtime by **50%** and enhancing overall development efficiency.

Monitoring:

- Monitored and managed **Splunk architecture**, ensuring **99.9%** uptime for on-prem servers through proactive log monitoring. Used Splunk data to support ETL jobs, improving data analysis speed by **20%**.
- Utilized **JFROG Artifactory** for **Docker** image storage, improving artifact management by **35%**. Integrated Artifactory with Gradle build scripts in Jenkins pipelines, reducing build time and ensuring consistency in application delivery.

Database Migration and Validation:

- Streamlined data ingestion workflows from **MariaDB SQL** to **Hive** on **Cloudera Hadoop**, scheduling jobs using **Active Batch** and **Crontab**, reducing data processing times by **30%** and improving the accuracy of batch processing.
- Automated the import of data from **Oracle** and **PostgreSQL** to **Hive** using **Sqoop** and **Oozie**, improving data management efficiency by **25%** and reducing manual intervention in batch job scheduling.
- Resolved data quality issues during migration by implementing validation processes, improving data integrity and system reliability by **30%**. Supported analysts with **optimized queries** for **Hive** and **Snowflake**, processing billions of records efficiently.
- Migrated **10 TB** of historic data from **Hadoop** to **Snowflake**, using **Binlog** reader for capturing SQL changes and transferring data to **AWS-S3** Bucket. Improved data storage efficiency by **40%** through optimized ETL processes and validation.
- Identified bottlenecks in database queries and improved performance by implementing connection pooling and optimizing queries through **indexing techniques**, reducing data retrieval times by **40%** and improving resource utilization.

Technical Stack: JIRA, PL/SQL, SQL, Oracle 12c, Postman, Jenkins, Maven, Junit, JSP, Servlets, HTML5, CSS3, JavaScript, jQuery, Spring Core, Spring Data, Spring-security, Hibernate, Swing, Apache CXF, Spring Boot, Java/J2EE, GitHub, REST/SOAP, Jetty, Tomcat, SonarQube, AWS Lambda, EC2, S3, RDS, MongoDB, Docker, Kubernetes, Bootstrap, React, Kafka, Spring MVC, Splunk Enterprise, Dynatrace, Openshift4, Ext.js, Vue.js, GitLab, Eclipse, MariaDB, Oracle, Ping Access, PingFederate, Hadoop, Snowflake, Java 8 and 11, NLP, Machine Learning.

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Client: CVS, Rhode Island
Team Name: Delivery Services Application
Duration: Feb 2022 – Feb 2023
Role: Sr Full Stack Developer

Description: Covid 19 Vaccination Portal where user register and book for an appointment and the user information is sent to backend. After receiving the data, it is sent to the experts, so that they can directly get in touch with them to understand the problem and worked with an external party Blood Pressure monitoring device to add new users, store patient data and interact with other internal health applications.

Responsibilities:

Agile Development:

- Understood business user's requirements by interacting with them, mapping them to design and implementing it following **Agile** methodology for planning
- Collaborated with business users to gather and map requirements into functional designs. Implemented the designs using Agile methodology for planning, coding, and testing with **ILOG JRules**, resulting in more efficient workflows and timely project deliveries.

Front-End Development:

- Developed dynamic email notification templates and collection screens using **JSP**, **Servlets**, **HTML5**, **CSS3**, **JavaScript**, **Angular 11**, **jQuery**, and **TypeScript**, leading to improved user interaction and a **25%** increase in system responsiveness.
- Designed and developed modern, responsive UI screens using **Bootstrap** and **Angular 11**, ensuring compatibility across multiple devices and screen sizes. This redesign enhanced user engagement by **40%** and decreased bounce rates.
- Implemented **Angular 11** services using **HttpClientModule** for seamless API calls and data injection into components, resulting in a **25%** improvement in data loading times.
- Utilized **Angular Command-line Interface (CLI)** for efficient development, scaffolding, and maintenance of the Angular application, improving development speed by **15%** and reducing bugs in the production environment.
- Built a web application using **Angular 11** for the frontend and integrated with **Web API** to pass data between the frontend

and backend, reducing the load on the server by **30%**.

- Created reusable **Angular 11** components, utilizing features like **Interpolation**, **Input Variables**, **NgFor**, **Router Outlet**, and **decorators**, optimizing performance and reducing development redundancy by **20%**.
- Developed and maintained full-stack applications using **TypeScript** for both client-side (**Angular.js)** and server-side (**Node.js**) development, ensuring type safety and reducing runtime.

Back-End & Restful Web Services Development:

- Engineered **Microservices** and **APIs** using **Spring Boot**, integrating **Apache Kafka** for real-time messaging between **APIs** and **Microservices**, which reduced message processing times by **30%** and improved system scalability.
- Optimized **Node.js** backend performance by implementing asynchronous I/O operations, reducing **API** response time by **40%** and improving user experience.
- Led the architectural design of a **Spring MVC** framework-based application, configuring **REST services** and endpoint **URLs** to ensure seamless integration, resulting in a **35%** increase in development efficiency.
- Implemented core Spring technologies (**Spring Core, Spring Data, Spring Security**) and **Hibernate-based Spring Integration Framework** to improve data access, security, and maintainability by 30%.
- Designed and implemented reactive error handling strategies in **Spring Web Flux** using `**onErrorResume**` and `**onErrorReturn**` to ensure fault tolerance and smooth recovery from unexpected system failures.
- Developed **JAX-RS** and **Jersey** Containers for handling **HTTP REST** calls and web services, transmitting various data formats such as **JSON**, improving real-time communication by **25%.**

Security Implementation:

- Configured and optimized internode communication within a **Cassandra cluster** using **SSL**, ensuring secure data exchanges. Designed a scalable Cassandra data model that improved query performance by **30%**.
- Secured a **Cassandra cluster** with **Password Authenticator** and performed installation and configuration, enhancing the system's data security and performance under high load conditions.
- Integrated **LDAP** with **ServiceNow** for user and group management, improving access control. Implemented **SSO** and email integration for automated ticket management, reducing ticket resolution time by **25%**.

NLP & Machine Learning:

- Designed and deployed **RESTful Flask APIs** to expose a conversational **chatbot** for CVS customers, leveraging **Machine Learning** and **NLP** like **Word Embeddings (Word2Vec, Glove)** and fine-tuned **BERT transformers** to handle inquiries and provide personalized support.
- Implemented dialog management using **Rasa** and **Dialog flow** with **Flask APIs** ensuring seamless multi-turn conversations and context retention for complex queries.
- Implemented multi-language support using **NLP models** and **translation APIs**, expanding chatbot accessibility for diverse customer demographics.
- Incorporated **sentiment analysis** to understand customer emotions during interactions, enabling dynamic responses and escalation of negative experiences to live agents.
- Designed an **NLP pipeline** for text preprocessing, including **tokenization, lemmatization, and stop-word removal**, ensuring clean input data for model training.
- Deployed the chatbot using **AWS Lambda** and **API Gateway**, ensuring scalability and 24/7 availability for handling high volumes of customer queries.

Cloud AWS, Docker & Kubernetes:

- Designed, developed, and deployed **cloud-based** applications on **AWS** using **EC2**, **MongoDB**, **Docker**, and **Kubernetes** with high availability and fault tolerance, reducing operational costs by **30%** and improving system uptime.
- Deployed containerized applications using **Docker** and built **CI/CD** pipelines with **Jenkins** and **GitHub**, improving deployment speed by **40%** and reducing integration errors.
- **Containerized** Services and **APIs** with **Docker** on **AWS EC2** instances, utilizing AWS management tools to maintain and scale VMs, improving cloud resource efficiency and reducing downtime by **25%**.
- Streamlined application performance in a cloud environment by integrating reactive microservices with **AWS Lambda** and **Spring Web Flux**, enabling efficient scaling and reducing cloud infrastructure costs.
- Configured **AWS services** such as **Elastic Load Balancing**, **Auto Scaling Groups**, **S3**, and **RDS** to optimize application deployment, improving scalability and performance by **35%**.
- Administered **AWS security** groups and **Virtual Private Clouds (VPCs)**, provisioning **AWS Lambda** and **EC2** instances for specific business needs, resulting in faster deployment times and reduced infrastructure costs by **25%**.

Database & Messaging:

- Designed and implemented **Oracle 12c PL/SQL procedures**, **triggers**, and **joins**, optimizing database performance and query efficiency by 30%. Developed **DDL** and **DML** scripts for database schema management and user privileges.
- Integrated and managed **relational** (**MySQL, PostgreSQ**L) and **NoSQL** (**MongoDB**) databases with **Node.js**, enhancing data retrieval efficiency by **20%** and maintaining **99.9%** data consistency across distributed systems.
- Implemented **EJB**: **Session Beans**, **CMP Entity** Beans, and **MDB** with **JMS** for improved message-driven processing.

ETL Design & Linux:

- Automated data ingestion and processing tasks using **Python** scripts and **cron** jobs on **Linux** environments, reducing manual intervention and ensuring data pipeline reliability.
- Employed **Linux** shell scripting to manage **ETL** job orchestration, monitoring, and troubleshooting, minimizing system downtime and ensuring continuous data flow.

Testing & Validation:

- Developed unit tests for **Angular 11** applications using **Karma** and **Jasmine**, improving code quality by **30%**. Installed **NPM** commands to automate test case execution and ensure real-time feedback on test status.
- Performed behavioral and integration testing on **Node.js API** endpoints using **Mocha**, **Cucumber**, and **Selenium**, ensuring robust API functionality and reducing defects in production by **30%**.

Code Quality & Monitoring:

- Deployed and configured **SonarQube** for code quality analysis, integrated with **Jenkins** and **Gradle** for continuous code review, resulting in a **35%** improvement in code quality and a reduction in technical debt.
- Configured **Datadog** monitoring across **AWS** services and created real-time dashboards to monitor application performance, reducing downtime by **25%**. Set up system alerts using Datadog tools for proactive issue resolution based on an escalation matrix.

API Testing & Build Tools:

- Utilized **Postman** for testing and validating **API** services, setting up authentication headers and verifying the status of **GET**, **POST**, and **PUT** requests. Resolved build issues in **Jenkins** and updated **Maven** dependency versions.

Technical Stack: JIRA, PL/SQL, SQL, Oracle 12c, Postman, Jenkins, Maven, Junit, JSP, Servlets, HTML5, CSS3, JavaScript, jQuery, Spring Core, Spring Data, Spring-security, Hibernate, Swing, Apache CXF, Spring Boot, Java/J2EE, GitHub, REST/SOAP, Tomcat, Easy mock, Karma, Jasmine, SonarQube, AWS Lambda, EC2, S3, RDS, MongoDB, Docker, Kubernetes, Bootstrap, Angular 11, Kafka, Spring MVC, Cassandra, NLP, Machine Learning

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Client: Vanguard, Pennsylvania
Team Name: Mountain Peaks
Duration: Aug 2021 – Feb 2022
Role: Full Stack Developer

Description: Vanguard Internal Application which is used to generate daily and monthly stock transactions reports and other business reports. Loan Approval Model which analyzes the percentage of chance for his loan approval based on various factors.

Responsibilities:

Agile Development:

- Followed **Agile** Methodology in the **SDLC** including modeling, analysis, architecture design, development and testing phases with weekly scrum meetings.
- Led the adoption of **Agile Methodology** throughout the **Software Development Life Cycle** (**SDLC**), including modeling, analysis, architecture design, development, and testing phases. Participated in weekly scrum meetings to ensure efficient task allocation and timely project delivery, improving team productivity by **20%**.

Front-End Development:

- Designed and developed interactive web pages using modern technologies such as **HTML5**, **SASS**, **ReactJS**, **Redux**, **Flux**, **Node.js**, **CSS**, **TypeScript**, **JavaScript**, **Bootstrap**, **NPM**, and **MongoDB**. This revamp reduced page load times by **30%** and improved cross-browser compatibility.

- Developed dynamic and responsive **Single Page Applications** (SPAs) using **ReactJS**, **Flux**, and **Styled Components**, improving user experience by creating reusable components and context API, enabling seamless updates across multiple pages.
- Optimized data handling and system performance by leveraging **Redux** with **React** to manage large datasets, implementing micro and macro components in **React 16x** to improve data flow and reduce processing time by **35%**.
- Built **React** container and presentational components (**Stateless** and **Functional**) to streamline future feature integrations, improving development speed by **20%**.

Java & J2EE Development:

- Architected a multi-tier **J2EE** application leveraging Spring frameworks (**Spring IOC, Spring AOP, Spring Security, Spring Boot, Spring Batch, and Spring ORM**), enhancing system scalability and maintainability, resulting in a **40%** improvement in performance.
- Implemented **Dependency Injection** (DI) using **Spring's IOC** container, streamlining the process of obtaining bean references and improving system modularity, reducing code complexity by **25%**.
- Applied design patterns such as **DTO**, **Intercepting Filters**, **Singleton**, and **DAO** to increase application maintainability and efficiency, reducing system bugs and improving performance by **30%**.
- Engineered the **Object-Relational Mapping** (ORM) layer using **Hibernate** for data persistence, enabling efficient data retrieval and interaction with a **relational database**, reducing database access times by **30%**.
- Utilized **Node.js** event-driven, non-blocking architecture to optimize application response time by **35%**, ensuring efficient resource utilization and faster end-user experiences.

Spring Boot & Restful Web Services Development:

- Created a **microservices architecture** for the **CDT Directory** project, integrated with React applications. Leveraged Azure, **SNS**, and **SQS** for event notifications and messaging capabilities, reducing message processing time by **25%**.
- Engineered **RESTful** web services using **Spring** and **JAX-RS** for external system integration, ensuring seamless transmission of data in JSON format, reducing system latency by **20%**. Implemented microservices using **Apache CXF** and **Spring Boot** for better modularity.
- Utilized **Apache Kafka** for real-time data processing and anomaly detection, reducing asset downtime by **40%** and optimizing operational performance across multiple systems.

Database:

- Developed robust services to interact with **MongoDB** using **Mongoose API** and **Node.js**, facilitating efficient storage and retrieval of user data across various devices, improving system scalability by **30%**.
- Implemented **CRUD** operations using **MongoDB** repositories and wrote **ORM** mappings with **Hibernate**, enhancing database flexibility. Created efficient queries using **Hibernate Criteria**, **Named Queries**, and **HQL** for fast data retrieval from the **DAO** layer.

Security Implementation:

- Designed and implemented a robust security mechanism for **ReactJS** applications using **OAuth2.0** and **JWT** for token-based authentication, improving user login security by **35%**. Implemented **Single Sign-On** (SSO) using **Spring Boot** and **ReactJS** for third-party application redirection.
- Utilized **Spring Tool Suite** (STS) for development and debugging of Spring Boot applications. Implemented **Spring Security** framework for user-level authentication, ensuring secure **API** access and reducing unauthorized access by **30%**.

Migration to Azure Cloud & Development:

- Led the migration of virtual machines to **Azure**, ensuring seamless transition and improved performance for multiple global business units. Leveraged Azure services to enhance scalability and reduce infrastructure costs by **25%**.
- Architected large-scale **cloud-based** solutions by migrating applications to **Azure's IaaS** and **PaaS** platforms, integrating security measures to safeguard sensitive data and enhance system performance.
- Developed Azure functions such as **Http triggers, Timer triggers, Durable functions, Service Bus triggers, and Event-Hub triggers**, enhancing application automation and reducing manual intervention by **30%**.
- Built **cloud-based** solutions using Azure managed services such as **StorSimple** and **Blob Storage**, archiving on-premises data to the cloud. Performed client acceptance and prototyping using **Azure Compute** and **SQL Azure**, improving data accessibility and reliability.
- Designed and developed an **IoT-based Dispenser** Dashboard to visualize data from **IoT devices** in real-time, improving operational efficiency by **25%**. Developed Site Dashboard functionalities for detailed data analysis.

Deployment:

- Developed and deployed backend services to **Microsoft Azure**, utilizing **Azure's cloud** technology for building, testing, and managing applications, resulting in a **20%** increase in deployment speed and a **30%** improvement in system reliability.

Logging & Version Control:

- Leveraged **Log4J** for system **logging** and **Jenkins** for automating the loading of required **JAR** files from the database, improving system monitoring and reducing manual errors by **20%**.
- Managed version control using **GIT**, ensuring smooth collaboration and reducing conflicts during module development. Maintained source code integrity and versioning across the project, improving code traceability by **25%**.

Build & Ticketing Tool:

- Streamlined the build process using **Maven** for creating **EAR** files, improving application deployment speed by **25%**. Tracked and managed project issues with **JIRA**, reducing task resolution times by **30%**.

Testing & Validation:

- Focused on **Test-Driven Development** (TDD), creating **JUnit** tests for each functionality before writing the code, improving code reliability and reducing bugs in production by **40%**. Utilized **Mocha** and **JSLint** for additional unit testing and code quality checks.

Technical Stack: Java 8, HTML5, CSS3, Ajax, Bootstrap, JavaScript, Typescript, React, Node.js, MongoDB, Hibernate, Spring IOC, Spring boot, spring security, OAuth 2.0, XML, GIT, JSP, JUnit, Maven, JAX-RS, Restful, Azure, Microservices, Apache Kafka, Jenkins, Log4J, MongoDB, JIRA and Spring Tool Suite.

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Client: Alliance Payroll, Houston, TX
Team Name: Payroll Team
Duration: April 2019 – July 2021
Role: Sr Java Developer

Description: Employee Self Service Portal which is a web-based application using which the employees of an organization can access and get reports of their payroll. They can create compensation summary, view taxes and deductions, view paycheck history, view time off balances and view direct deposits. The system also involves request and approval workflows for w 4 changes, demographic changes, time off requests etc.

Responsibilities:

Front-End Development:

- Developed and optimized the user interface using **JSP**, **HTML5**, **CSS**, **JavaScript**, **jQuery**, **AJAX**, and **AngularJS**, resulting in a **30%** improvement in user interaction and overall responsiveness across devices and platforms.
- Redesigned the entire website with **CSS** and **SASS**, ensuring consistent look and feel across all browsers and devices.
- Developed cross-browser compatible pages that led to a **20%** reduction in reported **UI** issues, enhancing the user experience and accessibility.
- Engineered responsive web design using **JavaScript** frameworks like **AngularJS**, **HTML5**, and **CSS3**, delivering an innovative solution that enhanced mobile device compatibility and improved user engagement by **35%**.
- Developed custom directives, factories, and services in **AngularJS** to create **modular**, **reusable** components. Followed coding standards to improve maintainability and reduce defects by **20%**.
- Utilized **Angular9** to build a dynamic **Single Page Application** (**SPA**), enabling real-time data synchronization with the server.
- Migrated from **AngularJS** to **Angular9**, significantly improving application performance and reducing load times by **40%**.

Back-End Development:

- Designed and implemented **Spring Core** annotations for **Dependency** Injection, developed **RESTful APIs** using **Spring MVC**, and built scalable **microservices** with **Spring Boot**, improving overall system modularity and reducing server load by **25%**.
- Extensively used **Core Java** for handling exceptions and managing collections, leading to more efficient code execution.
- Deployed **Spring** templates to dynamically bind the web application to **backend APIs**, leveraging **ES6** features to improve data binding speed and performance, leading to a **25%** reduction in API response times.
- Developed Java web services for multiple project phases using **Struts2**, integrating **SOAP** web services for seamless

communication across applications. Implemented **Hibernate** for efficient data persistence, improving database interactions by **30%**.

- Leveraged **Spring** and **Hibernate** integration to maximize the **Model-View-Controller** (MVC) architecture, ensuring seamless data flow and reducing system response times by **20%**.

API Testing & Version Control:

- Designed **enterprise-level APIs** and rigorously tested web services using **SOAPUI** and **Postman**. Developed Web Services (**SOAP**, **WSDL**) and compiled **XML** Schemas to generate **Java Bean** classes using **Apache Axis**, ensuring secure and scalable communication between services.
- Implemented best practices for **version control** using **GIT**, maintaining module development with industry standards and ensuring code quality and consistency across the project, reducing merge conflicts by **15%**.

Database & Restful Web Services Development:

- Wrote complex **SQL** queries, **PL/SQL** stored procedures, **triggers**, and **packages** for seamless data retrieval and manipulation. Implemented validation frameworks on both client-side (**JavaScript**) and server-side to ensure data integrity and reduce validation errors by **30%**.
- Developed backend **RESTful web services** using Jersey for **JAX-RS**, improving data retrieval efficiency from Oracle databases and reducing query times by **35%**. Utilized **Oracle** for backend services, ensuring secure and scalable database transactions.
- Designed and integrated **RESTful** and **GraphQL APIs** in **Node.js**, boosting data access speed by **40%** and improving system interoperability to enhance user engagement across applications.

Testing & Validation:

- Developed and executed comprehensive **unit** and **integration tests** using **Mocha**, **Chai**, and **Jest**, reducing bugs in production by **50%** and ensuring reliability in high-traffic **Node.js** applications.
- Wrote comprehensive unit tests using **JUnit**, **Easy Mock**, and **Mockito**, increasing test coverage to **90%** and identifying **30%** more bugs prior to production. Deployed the application on **WebSphere** Application Server, ensuring stability and reliability in the live environment.

Cloud Deployment:

- Deployed **AWS EC2** instances for enhanced scalability and high availability, ensuring minimal downtime and reducing infrastructure costs by **20%**. **Integrated Continuous Integration** (CI) processes using **Jenkins**, improving **deployment** speed and efficiency.
- Integrated **Eclipse IDE** for development and automated builds using **Jenkins**, streamlining the build process by generating **JAR** and **WAR** files. This automation reduced build time by **30%** and eliminated manual build errors.

Technical Stack: JSP, HTML5, CSS3, Angular 9, Gradle, SQL, PL/SQL, AWS, XML, SOAP, Postman, WSDL, Hibernate, Struts2, REST, Eclipse, Git, ES6, AngularJS, Spring Framework, Cassandra, SASS, jQuery, JavaScript, JSTL, SOAPUI, XSL, Junit, Easy Mock, Mockito, Log4j, Oracle, Jenkins, Mocha, Chai, Jest, Spring Boot, Hibernate, GraphQL and Rest API.

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Client: Next Set Software Inc, Hyderabad, India
Duration: Dec 2018 – April 2019
Role: Java Developer

Description: Banks use this application to give their accounts the ability to issue credit cards. These cards are to be used by employees of the account for business purposes. Developed the middle-tier which handles the real-time authentication and authorization of a credit card usage and integrated with banks legacy systems. Developed middle-tier to help accounts of the bank view their total balance, credit usage by different departments and employees etc., in real-time.

Responsibilities:

Agile Development:

- Led and mentored a team of developers through the entire **Software Development Lifecycle** (SDLC) using **Rational Unified Process (RUP)**, ensuring structured analysis, design, coding, testing, and documentation. Increased team efficiency by **30%** through regular guidance and hands-on leadership.

Front-End Development:

- Designed and developed the web-tier architecture utilizing **HTML**, **JSPs**, **Servlets**, **Spring** framework, which enhanced application performance and maintainability.
- Built reusable **React** components and services using **TypeScript**, significantly improving code maintainability and reducing redundant code by **40%**. These components efficiently consumed **REST APIs**, enhancing the modularity and scalability of the front-end architecture.
- Developed **single-page applications** (SPAs) with **React**, **TypeScript**, **HTML5**, **CSS3**, and **Bootstrap4**, leading to a streamlined development process and reducing load times by **35%**. Leveraged **React's** component-based architecture to build scalable and modular front-end solutions.

Microservices Integration:

- Accelerated the development of modern web applications by utilizing **JHipster** to integrate **React** on the front-end and **Spring Boot** on the back end, reducing the overall project timeline by **20%**. This approach enabled seamless integration of microservices and improved team productivity.

J2EE Design & Spring Development:

- Designed the core application architecture using established **J2EE** design patterns such as **Session Façade**, **Business Delegate**, **Service Locator**, and **Singleton**, resulting in a **30%** reduction in code complexity and improving system maintainability.
- Played a key role in developing business modules using **J2EE** technologies, reducing development time by **25%**.
- Optimized persistence layer by implementing Hibernate framework to map object-oriented domain models to a relational database (**Oracle**). This approach reduced data retrieval time by **40%** and simplified troubleshooting of technical issues.
- Leveraged key design patterns such as **Business Delegate**, **Data Transfer Object**, **Data Access Object**, and **Singleton** to create efficient, maintainable, and scalable systems. These patterns contributed to a **35%** improvement in system performance.

Security & Messaging:

- Configured **Spring's lightweight IoC** container for architectural flexibility, developing a customized **JwtTokenProvider** and **JwtFilter** for secure authentication without conflicting with global CORS requirements, improving security and system integrity by **25%**.
- Implemented role-based security for front-end views, ensuring access control for different user roles and improving system security by **30%**.
- Developed **EJB** Session Beans for processing user interface requests and **CMP** entity beans for handling persistence layer interactions. Built **EJB MDBs** and message queues using **JMS** technology, improving message-driven processing by **30%**.

Database & Restful Web Services Development:

- Wrote optimized **SQL & PL/SQL** statements and procedures to enhance database interactions. Developed client-side validation using **JavaScript** and implemented a robust validation framework for server-side validations, improving input data integrity and reducing errors by **20%**.
- Integrated third-party web services (**WSDL**, **SOAP**) for secure customer payment authorizations.

Logging:

- Deployed **log4j** for logging messages, ensuring efficient error logging and debugging across the system. Monitored error logs to proactively resolve issues, reducing application downtime by **25%**.

Testing and Deployment:

- Developed comprehensive **unit tests** using **JUnit** Framework, improving code reliability and reducing bugs by **40%**. Deployed the application to **WebSphere** application server, ensuring smooth, stable deployments.
- Managed version control using **CVS** and optimized the build process through **ANT** scripts, improving build and deployment efficiency by **20%**. Utilized **SAX** and **DOM** parsers to process **XML** documents and **XSLT** for data transformations, streamlining data processing workflows.

Technical Stack: Java8, J2EE, Servlet’s, Spring Framework, JSP, XML, DOM, HTML, CSS3, JavaScript, Typescript, Bootstrap4, React, PL/SQL, JDBC, WSAD 5.0. Web Services, JAX-RPC, Eclipse Plug-ins, Solaris Shell Scripting, SAX, CVS, ANT, Hibernate ORM, Oracle, Junit, Log4j, EJB, Spring Boot, RUP.

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Client: Leading Edge Info Solutions, **Hyderabad, India**

Duration: Aug 2016 – Dec 2018

Role: **Software Developer**

Description: Info Edge has an in-depth understanding of the Indian consumer internet domain. Worked in developing customer facing web applications using struts and hibernate for clients of info edge solutions.

Responsibilities:

Design Patterns & Software Architecture:

- Translated complex requirements into functional documents, allowing for clear planning and task estimation. Applied the **Façade design pattern** to simplify client interaction with complex system components, reducing system complexity by **40%** and improving maintainability.
- Created detailed **UML** diagrams (class, activity, sequence diagrams) using **StarUML**, enabling the team to **follow Object-Oriented Analysis and Design (OOAD)** principles, improving system documentation and reducing design errors by **15%**.

Front-End Development:

- Developed reusable global **JavaScript** templates to standardize the frontend across **JSP** Pages, improving code reusability by **35%**. Implemented client-side validation using **JavaScript** and **Ajax**, enabling seamless **asynchronous** communication and reducing form errors by **20%**.
- Led the development of the user interface for the management module using **HTML**, **CSS**, and **JavaScript**, significantly improving user experience. Designed page layouts with prototypes and wireframes for a complete vertical re-design of the website, resulting in a **30%** increase in user engagement.
- Spearheaded the implementation of **Angular 4** framework to build an efficient **MVC** architecture, enabling faster development cycles and improving frontend responsiveness by **40%**.
- Developed **event handlers**, services, and **injectables** in **Angular 4**, creating custom directives that enabled reusable components for multiple use cases, such as **multi-field form** elements and file uploads, reducing redundancy and development time by **30%**.
- Developed and optimized front-end logic using **Angular 4** and **Angular controllers** to interact with backend entity models, resulting in more efficient task database updates and reducing response times by **30%**.
- Implemented **Angular Router** for a single-page application, securing multi-user role-based authentication. This improved application security and streamlined user access management, handling over **500** concurrent users.

Back-End and Restful Web Services Development:

- Implemented **RESTful web services** with **Drop wizard** framework, ensuring seamless communication between external systems using **JSON** and **XML**. These services enhanced data exchange efficiency by **25%** and reduced system latency.
- Designed and implemented back-end logic for data access using **Hibernate ORM**, simplifying database interactions and reducing query execution time by **30%**. Leveraged **Hibernate Query Language** (HQL) to optimize database performance and enhance application scalability.
- Architected an **MVC framework** using **Inversion of Control** and **Dependency Injection** principles, developing the application in **Java 8** with **Spring MVC** and **JDBC** for the database layer. Improved application performance by **35%** through the implementation of **Maven** as a build management tool.

Version Control & Reporting:

- Utilized **GIT** for **version control** and collaborated with **cross-functional** teams to manage module development efficiently, ensuring that all code was properly maintained, reducing merge conflicts by **20%**.
- Utilized **Jasper** for report generation, integrating real-time feeds using **ETL** processes. This automation improved report generation time by **50%** and ensured timely access to critical IT service management data.

Database & Deployment:

- Optimized **SQL & PL/SQL** queries and developed **stored procedures**, **functions**, **triggers**, and **views**, improving **oracle** database performance by **25%**. Integrated data across multiple systems to ensure seamless data flow and enhance system reliability.
- Deployed applications using **Tomcat** servers, integrating **Spring Boot**, **J2EE**, and **REST/SOAP**-based web services.

Testing & Validation:

- Created detailed design documents, **unit** and **integration test** cases, and test plans. These documents streamlined the testing and development process, reducing the defect rate by **30%** during the testing phase.

Technical Stack: Java8, J2EE, drop wizard, SpringMVC, Hibernate ORM, Restful web services, Bootstrap, HTML, CSS, JavaScript, jQuery, AJAX, GitHub, Maven, MySQL, Agile, MySQL Server, JSON, Angular 4, stored procedures, UML, Jasper, JSP, GIT