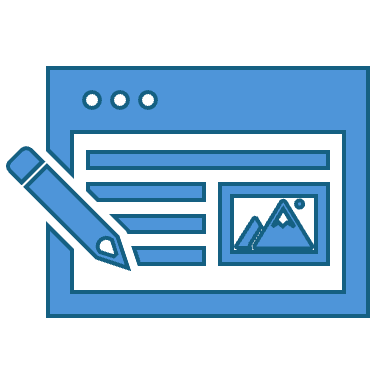
SAI PRANAV

[Portfolio](https://saipranavdev.github.io/pranav/) | A blue square with white letters

Description automatically generated with medium confidence [LinkedIn](https://www.linkedin.com/in/saipranavdev/)| A picture containing screenshot, mobile phone, smartphone, gadget

Description automatically generated 737-405-9121 | saipranav.javadev@gmail.com | A black cat with a blue circle

Description automatically generated with low confidence [GitHub](https://github.com/saipranavdev)|  [Blogs](https://medium.com/@saipranavjavadev)

**Professional Summary:**

* **7 years** of experience **in Java & J2EE**, specializing in **Spring Boot, Spring MVC, Spring Security, Spring Data JPA, Hibernate, and Java EE**.
* Expert in modern UI frameworks including **ReactJS, Angular 11, TypeScript, JavaScript, jQuery, and Bootstrap**, delivering responsive and dynamic user interfaces.
* Proficient in building reusable UI components with optimized performance for enterprise-grade web applications.
* Strong experience in **AJAX, JSON, RESTful API integration**, and asynchronous programming for seamless data fetching and manipulation.
* Expertise in **CSS3, SCSS, and responsive design**, ensuring cross-browser and mobile-friendly interfaces.
* Expertise in Microservices architecture, implementing service discovery, load balancing, and distributed computing using Spring Cloud, Eureka, and JHipster.
* RESTful API & Web Services development, using **JAX-RS, JAX-WS, JAXB, SOAP, Swagger**, and Postman for API design, documentation, and testing.
* Authentication & Authorization using **OAuth2.0, JWT,** ensuring secure access control across services.
* Proficient in event-driven architecture **Apache Kafka, RabbitMQ**, and **ActiveMQ** for real-time data processing.
* Advanced concurrency & multithreading skills, optimizing **Java** applications with thread pools, locks, and parallel processing techniques.
* Strong experience in containerization & orchestration, deploying scalable microservices using Docker, Kubernetes.
* Experienced in **DevOps, CI/CD** pipelines, leveraging **Jenkins, GitLab CI/CD**, GitHub Actions, and infrastructure as code (Terraform, CloudFormation).
* Web & application server management, deploying and optimizing applications on **Apache Tomcat**, **WebLogic**, **JBoss**, and **Jetty**.
* Expertise in relational databases including **MySQL, PostgreSQL**, and **Oracle**, handling schema design, indexing, and query optimization.
* Experience in NoSQL databases, using **MongoDB, DynamoDB**, and Redis for high-performance data storage.
* Efficient database interactions via **JPA, Hibernate, JDBC, PL/SQL, stored procedures, triggers**, and functions.
* Data warehousing & big data processing, leveraging Apache Spark, AWS Glue, and EMR for large-scale analytics.
* Hands-on experience in unit and integration testing, using **JUnit, Mockito, TestNG**, and **Selenium**.
* API testing proficiency with **Postman** and **REST** Assured, ensuring reliability and performance of web services.
* Continuous monitoring & logging, using **Prometheus, Grafana, Splunk**, and **ELK Stack** (Elasticsearch, Logstash, Kibana) for real-time application insights.
* **CI/CD testing** automation, integrating test suites into **Jenkins, GitLab CI/CD** for maintaining high code quality.

**Technical Skills**

|  |  |
| --- | --- |
| **Methodologies** | Software Development Life Cycle (SDLC), Agile, Waterfall, Scrum, TDD |
| **Programming Languages** | C, C++, Java, JavaScript, Python, SQL |
| **Frontend Technologies** | HTML5, CSS3, Bootstrap, JSP, AngularJS, NodeJS, ReactJS, Redux |
| **Backend Technologies** | Spring Framework (Spring Boot, Spring MVC, Spring Data, Spring Security), Hibernate (ORM), J2EE (Servlets, JSP), RESTful APIs, JMS, JDBC, Microservices Architecture. |
| **Messaging and Streaming Systems** | Active MQ, JMS, SQS, and Apache Kafka |
| **Database Technologies** | MySQL, Postgres, Oracle, DB2, MongoDB |
| **Cloud Technologies** | Amazon Web Services (AWS EC2, S3, SQS, Lambda, API Gateway, CloudFormation), Microsoft Azure, Google Cloud Platform (GCP) |
| **Containerization and Orchestration. CI/CD** | Docker, Kubernetes, Helm, Jenkins, GitLab |
| **Version Control Tools** | Git, GitHub, SVN, BitBucket/Stash |
| **APIDocumentation and Testing Tools** | JUnit, Mockito, Selenium, Postman, JMeter |
| **Code Quality and Monitoring** | SonarQube, ELK Stack (Elasticsearch, Logstash, Kibana), Prometheus, Grafana, Log4J |
| **Security and Authentication** | OAuth2.0, JSON Web Tokens (JWT) |
| **Development Tools and IDEs** | IntelliJ IDEA, Eclipse, Visual Studio Code, Spring Tool Suite(STS), PyCharm, Anaconda |
| **Design Patterns and Architectural Styles** | MVC, Microservices, Serverless Architecture |
| **Web Services** | RESTful APIs, SOAP, API Gateway, Swagger, GraphQL |
| **Other** | XML, JSON, Design Patterns, Linux/Unix |

**Professional Experience:**

**Client:** **Southwest Airlines, Dallas, TX Mar 2024 – Present**

**Role: Java Full Stack Developer**

**Responsibilities:**

* Worked in a highly dynamic Agile environment, actively participating in **Scrum** meetings, sprint planning, and retrospectives to ensure efficient development cycles.
* Designed and developed FinTech services using Java, **Spring Boot**, and **React.js**, supporting financial workloads across on-premises and cloud environments.
* Leveraged **HTML5, CSS3, Bootstrap**, and AngularJS for responsive web design, enhancing user experience.
* Created reusable, scalable React.js components, utilizing React Hooks, Redux, and Flux for state management.
* Developed custom directives, services, and pipes in Angular 10, adhering to best coding for modular architecture.
* Integrated AJAX for asynchronous data updates, improving page responsiveness without full reloads.
* Proficient in handling web and application servers such as WebLogic, WebSphere, Apache Tomcat, Glassfish, and JBoss, including JMS configuration and connection pooling.
* Extensive experience with **Java 8/J2SE/J2EE**, implementing **OOPS** concepts, Multithreading, Synchronization, Serialization, JDBC, and Collections framework.
* Built server-side logic using **Spring MVC, Spring Boot, Spring Core, and Spring AOP,** ensuring scalable and maintainable application architecture.
* Developed robust RESTful APIs and SOAP web services using Spring MVC, JAX-RS, JAX-WS, and Spring-WS, ensuring seamless third-party integrations.
* Implemented **ORM** using **Hibernate and Spring ORM**, streamlining database operations with Oracle, MySQL, PostgreSQL, AWS DynamoDB, and MongoDB.
* Optimized **SQL/PL-SQL** queries and leveraged NoSQL solutions for improved data retrieval and storage.
* Designed hybrid cloud architectures with **AWS, Azure**, and **on-premises** solutions, ensuring secure storage.
* Integrated **Kafka** and **RabbitMQ** for real-time event-driven architecture, enabling scalable messaging systems.
* Configured Redis Cache to enhance application performance by caching frequently accessed data from APIs.
* Deployed and managed microservices architecture **using Spring Boot and RESTful APIs**, improving modularity.
* Worked with **OAuth2, JWT**, and **Spring Security** to implement secure authentication for web applications.
* Handled real-time data streaming and messaging using **Spring Kafka** and **RabbitMQ**, improving event-driven communication.
* Deployed and orchestrated containerized applications using **Docker** and **Kubernetes** on **AWS EC2** and **GCP**.
* Engineered **CI/CD** pipelines using **Jenkins, GitHub, Bitbucket**, and **Maven**, automating testing, deployments.
* Conducted code reviews and provided feedback on **Java Spring Boot** applications, improving code maintainability and best practices.
* Conducted unit testing with **JUnit and Mockito**, ensuring code reliability and robust backend functionalities.
* Monitored system logs and performance using **Splunk, Log4J, Prometheus**, and **Grafana**, proactively identifying and resolving production issues.
* Designed real-time data processing pipelines with **Spark Streaming** and **Kafka**, Optimizing data throughput.
* Utilized Swagger for API documentation, improving developer onboarding and third-party integration processes.
* Automated **API testing** and **integration** testing using Test containers, ensuring reliable database interactions.
* Performed unit testing using **JUnit and Mockito**, achieving higher test coverage, reducing production defects.
* Employed **JIRA** for issue tracking, maintaining an organized development workflow in Agile environments.

**Client:** **Cognizant, Atlanta, GA Oct 2022 – Feb 2024**

**Role:** **Java Full Stack Developer**

**Responsibilities:**

* Involved in Requirements gathering, Analysis, Design, Development and Testing of application using **AGILE** methodology (**SCRUM**) in a Test-driven Development (**TDD**) approach.
* Developed and implemented **Object-Oriented Programming (OOP)** principles using **Java 8** and **J2EE**, improving the scalability of web-based enterprise applications, leading to a **40% decrease in application response time**.
* Implemented the application with the **HTML5, CSS3, JavaScript**, **ReactJS, AJAX, Redux**, **JAVA 8 features, Spring Framework, Spring Boot ,RESTful webservices, Hibernate** emphasizing security through Spring Security,.
* Implemented the application using **HTML5**, **CSS3**, **JavaScript**, **ReactJS**, **AJAX**, **Redux**, and **Spring Boot**. Incorporated **Java 8 features** like **Lambda expressions**, **Streams**, and **Spring Security** for secure, efficient, and scalable backend services, and implemented **OAuth 2.0** for user authentication.
* Created reusable **React components**, both functional and class-based, improving the modularity and efficiency of the application’s UI components.
* Developed and maintained **Single Page Applications (SPA)** with **React Router**, allowing for smooth navigation and dynamic rendering of content, without page reloads.
* Managed application state and databinding by utilizing **React’s state** and **props**, effectively connecting backend API data with the user interface to enable dynamic and interactive web experiences.
* Leveraged **React lifecycle methods** and **ES6+ features** under class components, and implemented **React hooks** such as **useState**, **useEffect**, and **useContext** in functional components for efficient state management and side-effect handling.
* Created and configured the **Redux** **store**, defined actions, and wrote reducers to manage state changes, ensuring a centralized and predictable state management system.
* Replaced local component state with **Redux** for better state consistency and reduced complexity, leading to more maintainable and scalable state management.
* Configured and utilized **Redux** DevTools for debugging and tracking state changes, providing insights into action dispatches and state transitions for better troubleshooting.
* Configured and utilized **Redux** for centralized state management, optimizing performance with memoization and efficient state updates to reduce unnecessary re-renders, thereby improving application responsiveness
* Utilized **Spring Boot** and **Spring MVC** to build **RESTful APIs** and **microservices** for seamless communication between the frontend and backend systems.
* Applied **Spring Security** for implementing robust authentication and authorization mechanisms, ensuring secure data transactions across multiple microservices.
* Designed and implemented **REST APIs** for account management and transaction processing, ensuring effective communication between microservices and front-end applications.
* Integrated **PostgreSQL** as the primary relational database for efficient data storage and retrieval, optimizing SQL queries for improved data access performance.
* Participated in the creation of Spring Configurations using **Java8 features, Lambda Expressions, Streams, Filters**.
* Integrated Java application with **PostgreSQL** databases for efficient data storage and retrieval.
* Wrote optimized **SQL** queries to support business logic and enhance data access performance, ensuring scalability and responsiveness of applications.
* Implemented **Apache Kafka** to provide a unified, high-throughput, low-latency platform for handling message exchange between microservices, improving decoupling and scalability in the system
* Created **Kafka producers** in Java microservices to publish messages to Kafka topics and Kafka consumers to process these messages, facilitating data processing and inter-service communication.
* Leveraged **Spring Core**, **Spring Data**, **AOP**, **Spring Web**, and **Spring Security** to build robust business operations, ensuring transactional support and effective security policies for all services.
* Developed and executed unit tests using **Mockito** to create mock objects, stub method responses, and verify interactions for microservices developed.
* Utilized **MongoDB** as a NoSQL database to store and retrieve non-relational data, optimizing database queries to enhance application performance.
* Configured and deployed **Elastic Search** clusters to handle large volumes of structured and unstructured data, improving data retrieval speed and application performance.
* Tuned **Elastic Search** configurations (index settings, shards, and replicas) to optimize search performance and ensure fault tolerance in a distributed environment.
* Designed efficient **Elastic Search schemas** (index mappings) to optimize the indexing of large datasets, ensuring fast query responses while maintaining the integrity and relevance of search results.
* Utilized dynamic and static mapping techniques for automatic field recognition and fine-tuned mappings for specific data types like text, keywords, and geo-points to enhance search accuracy.
* Deployed the application on **AWS** utilizing EC2 and S3 to ensure scalability, reliability, and high availability, while managing user permissions with IAM and implementing security measures with Security Groups.
* Established CI/CD pipelines with Jenkins on AWS, incorporating AWS Lambda functions and API Gateway for serverless endpoints to improve deployment efficiency and lower operational costs
* Used **SonarQube** to analyze source code quality and **Git** as Version Control System for the application.
* Collaborated with cross-functional teams in Agile/Scrum environments to deliver high-quality software solutions within sprint timelines, by participating in sprint planning, daily stand-ups, and sprint retrospectives to ensure project goals were met effectively.

**Client:** **Baker Hughes, Houston, Texas** **Jan 2021 –Jul 2022**

**Role: Full Stack Java Developer**

**Responsibilities:**

* Developed core functionalities following Agile Scrum methodology, with extensive experience in Test Driven Development (TDD) to ensure high-quality, reliable code.
* Led the development of dynamic and responsive user interfaces by leveraging **Spring MVC** for the backend and **HTML5**, **CSS3**, **JavaScript**, **TypeScript**, and **ReactJS** on the frontend, ensuring seamless integration of features.
* Designed and implemented reusable and modular UI components using **React.js**, optimizing code reusability and scalability throughout the application.
* Integrated **Redux** for state management in React applications, ensuring centralized, predictable, and efficient handling of application state and improving maintainability.
* Created responsive and user-friendly interfaces using **React.js**, integrated with CSS frameworks like Bootstrap or Material UI, ensuring optimal performance across different devices.
* Applied **React hooks** for efficient management of component lifecycle and state in functional components, resulting in cleaner, more concise code.
* Built seamless navigation in single-page applications using **React Router**, enabling dynamic rendering and smooth transitions between components.
* Implemented state management in **React** applications using **Context API**, ensuring predictable and centralized handling of application state.
* Utilized advanced **Java** concepts such as **multithreading**, **collections framework**, **file I/O**, and **concurrency** to develop scalable and high-performance backend logic.
* Leveraged **Java 8** features like Lambda expressions to streamline code, developed resource classes, and integrated database operations.
* Designed, developed, and tested **microservices** using **Spring Boot**, ensuring scalability, modularity, and ease of maintenance for complex enterprise-level applications.
* Applied Spring Core annotations for dependency injection, used **Spring MVC** for REST APIs, and utilized Spring Boot to streamline microservices development.
* Developed and deployed **cloud-hosted web applications** and REST APIs using **Spring Boot** with embedded **Tomcat**, ensuring high availability and automatic scaling in cloud environments.
* Deployed applications on **AWS** using services like **S3, EC2, Lambda**, and **CloudFront**, optimizing for large-scale, scalable solutions.
* Integrated and automated deployment processes using **Jenkins**, **Bamboo**, and **GitLab CI**, streamlining the CI/CD pipeline to accelerate development cycles.
* Utilized **Kafka** for asynchronous communication between **microservices**, enhancing system decoupling and improving scalability in the application architecture.
* Worked with **DevOps** and Production team in operationalizing Kafka and provide support in troubleshooting production issues.
* Implemented **OAuth** **2.0** to secure Spring Boot REST API, including configuring an authorization server, managing access tokens, and enforcing role-based access control.
* Designed and executed complex **SQL queries** for retrieving and manipulating large datasets, optimizing database performance and supporting enhanced reporting capabilities.
* Collaborated with the database team to enhance query execution plans and optimize database operations for better resource utilization.
* Utilized **Log4j** for logging and debugging, maintaining detailed traceability to monitor application behavior and troubleshoot issues efficiently.
* Employed **Hibernate** in the DAO layer for seamless **object-relational mapping**, enabling efficient interaction with databases like **DB2** for CRUD operations.
* Created and maintained **shell scripts** for build and deployment automation and used **Unix-based monitoring tools** to track application performance and resolve issues in real-time.
* Implemented full-text search capabilities using **Elastic Search’s** querying mechanisms (match, multi-match, term queries, etc.) to provide users with accurate, relevant results from vast datasets.
* Set up and maintained **test automation frameworks** using **Cucumber** feature files, integrated with **Selenium** and **TestNG** for automated regression and functional testing.
* Managed **issue tracking** and **bug resolution** through **JIRA**, ensuring timely responses and improving team collaboration on critical tasks.
* Applied **Git** for version control and collaborated on source code management, ensuring the integrity and smooth flow of development tasks.
* Automated **web application tests** using **Selenium WebDriver**, applying **Page Object Model (POM)** to enhance code reusability and test maintenance.
* Executed **unit tests** using **JUnit** to ensure code reliability, employing assertions and verifications for code correctness.
* Executed unit tests using **JUnit** in Selenium, incorporating assertions to ensure code reliability and functionality.
* Maintained and executed **Maven** and **Jenkins** build files to automate tests, improving the CI/CD pipeline's efficiency.
* Performed data analysis using **SQL** queries in **SQL Plus**, providing actionable insights and supporting decision-making with data-driven reports.

**Client:** **DXC Technology, India Jan 2020 – Oct 2020**

**Role: Software Developer**

**Responsibilities:**

* Implemented and maintained application with Waterfall methodologies.
* Used validation controls in Java Script for validation purposes and extensively used Database validations.
* Developed several web pages using HTML, CSS, JSP and Java to performed checking , validations at Client’s side.
* Designed a website using **ReactJS** and **JavaScript** which provides a platform for educational institutions to deliver online education.
* Designed and integrated RESTful APIs using Spring Boot, Spring MVC, and Spring WebFlux, facilitating seamless client-server communication.
* Developed full-stack applications using **React.js, Thymeleaf** for UI, **Spring Boot, Spring Cloud** for business logic, and **Spring Data JPA, hibernate** for database interactions, ensuring scalability and performance.
* Extensively worked on front end, business, and persistence tiers using the **Spring** framework.
* Worked in using **React** **JS** components, Forms, Events, Keys, Router, Animations and Flux concept.
* Presented a unique and responsive user interface using JavaScript, HTML5, CSS3, NodeJS.
* Collaborated with the full stack software developers in a team and followed **SCRUM** methodology along with JIRA and Gitlab for the website development and performed code and design reviews according to development standards.
* Worked with IDE as Eclipse and deployed into **Apache Tomcat Web Server, JBoss** & used **Maven** build tool to achieve more functionality for build process.
* Developed more than 25 React Components (site pages, page layouts, web parts) for the company’s portals.
* Integrated Single Sign-On (SSO) using **OAuth** for a **React**.js application that includes configuring OAuth providers, implementing secure authentication flows, handling token management.
* Integrated **RESTful** web services and handled asynchronous data retrieval using AJAX calls, ensuring seamless data communication between the client-side and server-side.
* Automated testing in React using Jest and React Testing Library, achieving high test coverage and reducing bugs in production.
* Managed large datasets using NoSQL databases like **MongoDB**, ensuring high performance and scalability.
* Collaborated with cross-functional teams to deliver feature-rich applications within project deadlines.
* Conducted code reviews and provided constructive feedback to improve code quality and maintainability.
* Implemented test automation **Junit** improving overall test coverage by 40%.
* Performed unit testing using JUnit and Mockito, achieving higher test coverage and reducing production defects.

**Client:** **Experian, India**  **Jul 2018 – Dec 2019**

**Role: Software Developer**

**Responsibilities:**

* Designed and developed the user interface using Spring MVC, JSP, JSTL, JavaScript, custom tags, jQuery, HTML, and CSS to create dynamic and user-friendly web pages.
* Implemented the web layer using **Spring MVC** and **Spring WebFlux**, creating controllers, views, and validators for optimized user interaction and reactive data processing.
* Built the service and domain layers using Spring Framework modules such as Core-IOC and AOP, facilitating dependency injection and aspect-oriented programming for modular and maintainable code.
* Developed a robust application framework with Java, Spring, Hibernate, and Log4J to support scalable and efficient application architecture and logging.
* Developed a scalable microservices-based application using **Java**, **Spring Boot**, **Spring Data JPA**, and Logback, ensuring efficient logging, monitoring, and application performance.
* Configured Hibernate session factory in applicationContext.xml to integrate Hibernate with Spring, enabling seamless persistence and database interaction.
* Integrated **Spring Data JPA** with Hibernate for seamless persistence, implementing repository patterns and query optimizations.
* Set up Spring's ApplicationContext.xml to enable effective communication between various components and handlers within the application.
* Configured Spring Boot properties and profiles for environment-specific settings, ensuring smooth communication between services and external components.
* Created RESTful APIs using **Spring Boot, Spring MVC, and Spring Web Flux**, developing service classes and DAOs for handling data operations efficiently.
* Designed and implemented database schema including tables, functions, and joins, and wrote prepared statements using PL/SQL to support complex data operations and business logic in Postgres.
* Created and optimized **MySQL** stored procedures and triggers to perform calculations and updates on tables, implementing essential business rules and processes.
* Utilized Maven for building the application and deployed it on JBoss Application Server, streamlining the build and deployment processes.
* Performed development tasks using IntelliJ IDEA and deployed applications on JBoss Application Server, ensuring effective code management and deployment.
* Monitored application logs using Log4J to capture and analyze error and debugging information for troubleshooting and maintenance.
* Implemented **JMS** message listeners with Spring JMS and JMS queues to handle asynchronous processing, enabling efficient message-driven architecture.
* Secured microservices using Spring Security, OAuth2, and JWT authentication, enforcing access control, encryption, and compliance with security standards.
* Implemented CI/CD pipelines with Jenkins and Kubernetes, automating builds, tests, and deployments for continuous integration and delivery.

**Client:** **Experian, India**  **Nov 2017 - Jun 2018**

**Role: Software Developer Intern**

**Responsibilities:**

* Assisted in developing user interfaces using Spring MVC, JavaScript, jQuery, HTML, and CSS to create web pages.
* Worked on RESTful APIs using Spring Boot and Spring MVC, helping to implement controllers and services for handling data requests.
* Gained experience with Spring Boot and Hibernate by working on simple database queries and integrating Spring Data JPA for data access.
* Helped configure and manage application properties in Spring Boot, ensuring smooth communication between components.
* Assisted in writing and optimizing SQL queries in PostgreSQL and MySQL, improving database performance.
* Worked with Spring Security and OAuth2 to understand user authentication and secure API access.
* Supported microservices development using Spring Boot and Spring Cloud, learning how services interact in a distributed system.
* Helped monitor application logs using Spring Boot Actuator and Log back, assisting in debugging and troubleshooting issues.
* Learned about containerization using Docker and worked on deploying applications in test environments.
* Gained hands-on experience with CI/CD tools like Jenkins, assisting in automating builds and deployments.

**Education:**

**Master of Science, Computer Science** |Texas State University, USA

**Bachelor’s in technology, Information Technology** | MVSR Engineering College, India