**Saransh Bhardwaj**

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**Professional Summary:**

* Have 9 years of professional experience in designing and developing web-based and enterprise applications using Java, Kotlin, and NodeJs technologies in financial, hospitality, and digital domains.
* Experienced in all phases of the Software Development Life Cycle, including Requirement gathering, Design, Development, Support, Integration, and Maintenance.
* Experience in working in environments using Agile (Scrum, Kanban) and Waterfall development methodologies.
* Used Docker to containerize the applications and deployed them on AWS ECS.
* Expertise in client and server scripting languages like HTML5, JavaScript, Typescript Bootstrap, ReactJs, VueJs, Redux, and Figma.
* Set up IAM policies and single sign-on (SSO) for the web applications using AD B2C
* Solid understanding of service-oriented architecture and microservices, along with REST and gRPC
* Implemented Infrastructure as Code using Terraform to set up and tear down the cloud environments
* Adhered to SOLID design principles and design patterns such as Factory, Singleton, Dependency Inversion, and Observer.
* Experience in developing web-based enterprise applications using Core Java, Kotlin, NodeJs, C#, Web Services (SOAP and REST), MVC Frameworks, SQL, and NoSQL.
* Implemented data consumption from webhooks and created connections with APIs.
* Deployed Java and Node applications on AWS and Azure using tools like Terraform.
* Solid experience with Relational databases like Postgres, MS SQL, and No SQL databases like Mongo DB and Dynamo DB.
* Developed Android application and set up event buses to propagate the data through different layers
* Experienced in the implementation of a Message queue using RabbitMQ and Pulsar to process data in an asynchronous way.
* Experience with Jest, JUnit, and Mockito in developing test cases to test the service layer of the applications.
* Developed AWS serverless lambda functions to feed SPA written in Angular
* Set up Jenkins pipelines and integrated SonarQube to instill test coverage standards across multiple teams.
* Integrated Splunk and Sentry with the applications to track issues in pre-production and production environments.
* Integrated Snyk with Jenkins to scan security vulnerabilities among packages.
* Implemented Redis cache between microservices to reduce the API calls and improve the response time.
* Solid knowledge of version control tools like GIT.
* Hands-on experience in building tools like Maven and Gradle.

**Technical Skills:**

**Languages**: Java, Kotlin, NodeJs, C#

**Web Technologies**: HTML5, CSS3, JavaScript, Typescript, ReactJS, VueJs, Axios, Bootstrap, JSON, Figma.

**Tools & Framework**: MVC, MVVM, Dropwizard, Spring Boot, .Net Core.

**Development Tools**: IntelliJ, Eclipse, VS Code, Visual Studio.

**Databases**: MS SQL, MySQL, Postgres, MongoDB, Dynamo DB.

**Cloud Technologies**: AWS EC2, S3, Lambda, Route 53, ECS, Docker, Azure VM, AD B2C.

**Professional Experience:**

**Toast Inc, Champaign, Illinois April 2022 – Present**

**Staff Software Engineer**

* **Voice AI Assistance:**

AI voice bot designed to address a wide range of guest inquiries, thereby optimizing operational efficiency and contributing to significant time and cost savings for the restaurant.

**Role:**

* Set up microservices to ingest data from telephony APIs and processed data to feed into the neural engine along with writing unit and integration tests - Java, Kotlin, NodeJs, Jest, JUnit
* Used Gradle to package the applications
* Designed SPA to implement an analysis dashboard and onboarding flow for the customers - ReactJs, Typescript, Redux, Figma
* Designed DynamoDb tables and caching and used Terraform to set the environment, such as setting up IAM controls, scaling configurations
* Integrated Splunk to track errors in pre-production and production
* Configured AI intents and entities to feed data into the neural engine
* Implemented Redis cache to improve response time and reduce API calls
* Used gRPC for internal microservice interactions and serialized the data using protobuf
* Worked in 2 weeks of agile sprints for planning road maps and retrospective meetings to incorporate learnings
* **CallerID Concierge Answering:**

Facilitate seamless integration by enabling restaurants to access guest details directly on the POS system during incoming calls and providing a comprehensive overview of analytics.

**Role:**

* Created a SPA dashboard for analytics, which helped the customers make informed decisions - ReactJs, Typescript, Figma
* Used Redux to manage the state of the application
* Set up unit testing using Jest to test components and client layer
* Designed microservices with REST APIs to capture incoming calls and hosted them on AWS EC2 - NodeJs, Kotlin, Java
* Set up Jenkins CI/CD pipeline for deployment and configured SonarQube to adhere to code coverage best practices.
* Integrated Sentry so that teams can get email notifications for production errors.
* Implemented gRPC with protobuf to interact with different services
* Implemented pub/sub architecture with RabbitMQ to transfer data from Kotlin APIs to the Mobile application.
* Added event buses in the Mobile application to seamlessly transfer the data

**Applied Research Associates, Champaign, IL June 2017 – April 2022**

**Staff Software Engineer**

* **Bridge care application:**

Developed Web applications, which DOT will use to maintain the bridges of a state/county.

**Role:**

* Did initial scaffolding of the application using Java Spring boot Web API and frontend application using ReactJs and Redux
* Did initial plumbing to set up Nodejs, MongoDB, and Socket IO connection with the ReactJs application
* Created REST APIs in Java and Nodejs, which are used by the ReactJs application. Added Junit testing for the business logic
* Deployed the application in Azure virtual machine
* Implementing Azure AD B2C for the Nodejs and ReactJs application
* Configured Mongo DB to store the analysis data.
* Provided mentoring to the new employees and helped them create short-term and long-term goals
* Offered guidance along the way and encouraged them to step out of their comfort zone
* **Mechanistic-Empirical design software MVP:**

Developed a Web/Windows application, which civil engineers can use to estimate the lifetime of the pavements by entering various parameters.

**Role:**

* Launched the MVP, created the front end of the application in Angular, and set up backend APIs in Java
* Configured Unit testing for the application from scratch using Karma and Jasmine framework
* Implemented NgRx Store, Actions, and Reducers based on Redux to manage the state of the application
* Developed REST APIs using Java and Spring Boot, created a data access layer to connect with the SQL database

**Accenture, Bangalore, India May 2013 – June 2016**

**Software Engineer Analyst**

**Responsibilities:**

* Solved the performance problem of slow and dull legacy applications by revamping a facet search menu
* The pages were getting loaded 70% faster, and the ease of search was significantly increased Used ASP .NET Web APIs to create microservices with MS SQL
* Designed a single page app (SPA) using Angular 1, C#, .Net 4.5, MS SQL, VS 2013, and TFS
* Set up data access layer to connect the backend service to MS SQL database.
* Learned Angular 1, its directives and routing, along with C# interface, Generics, and delegates

**EDUCATION:**

* Bachelor’s - Biomedical Engineering from Vellore Institute of Technology, GPA 8.30/10
* Master’s - Information Technology from the University of North Carolina, Charlotte, GPA 4.00/4.00