**Lakshmi Mupparaju**

**Objective**

Experienced **Full-Stack Engineer** seeking senior software engineer roles to leverage 5 years of expertise in building scalable systems and driving innovation.

# Education

**Master’s Degree, computer science**  2022 - 2023

Northwest Missouri State University

**Bachelor of Technology in Computer Science** 2016 - 2020

KL University, India

# Professional Summary

* **5+ years** experienced **full stack senior software engineer** with expertise in building robust, scalable systems.
* Experience in **leading architecture and design sessions**, as well as conducting **code reviews** with peers, to enhance product quality while **mentoring junior team members**. Adept at **client relationship management and gathering requirements**.
* Extensive experience across all stages of the Software Development lifecycle and various architectural styles, including **microservices, client/server, n-tier, MVVM, and MVC**.
* Proficiency in **RESTful APIs** web design using technologies like **NodeJS, React, Redux, JavaScript, TypeScript, Angular, RxJS/NgRx, HTML5, CSS, jQuery RTK Query, and Google Maps API.**
* Expertise in web development using **C#, ASP.NET, ASP.NET MVC, .NET Core, SOAP, XML, WSDL.**
* Extensive experience in **SQL and NoSQL** database development, including **PostgreSQL, Oracle, MS SQL Server, Cassandra**, and quality assurance processes like unit testing, integration testing, and performance optimization techniques.
* Deployment experience in **continuous integration and deployment** using **Docker, Kubernetes, Jenkins, and DevOps pipelines**, emphasizing security best practices.
* Well-versed in **Amazon Web Services (AWS),** with a focus on **EC2, S3, VPC, Elasticsearch, and Kinesis**.
* Experience with **Azure**, particularly in **Azure Blob Storage and SQL Database**, with a commitment to continuous learning and adaptability.
* Proficient in testing, including **JEST, JOI schema validation, NUnit with Moq, Fluent Assertions, Visual Studio Unit Test Cases, and test-driven development (TDD),** with a focus on documentation and knowledge sharing.
* Accomplished in the development and management of **Product Backlogs and writing functional specifications,** with **project management** skills for planning, executing, and monitoring projects.
* Proficient in effectively processing **IoT device** data (GPS, Cellular, Bluetooth Low Energy, and QR technologies) through **Extraction, Transformation, and Loading (ETL)** techniques ensuring seamless integration and utilization within systems and applications.
* **Agile** implementation through **daily SCRUMs**, day-to-day user interactions, and a focus on problem-solving and decision-making.
* Solid knowledge **of deploying and executing release designs, asset verification,** and ensuring test environments align with testing partners, emphasizing **quality assurance** and **performance optimization**.

# Technical Skills

|  |  |
| --- | --- |
| **Programming Languages & Technologies** | C#, .NET Technologies (ASP.NET, MVC, .NET Core, WEB API), SQL |
| **Databases & Data Access** | PostgreSQL, Oracle PL/SQL, SQL Developer, MySQL, Microsoft SQL Server, AWS Dynamo, DBeaver, Azure SQL Database, Cassandra (NoSQL), Entity Framework (for .NET data access) |
| **Front End & Web Technologies** | AWS (Amazon Web Services), Azure, Node.js, TypeScript, JavaScript, React, Angular (8/10/12/16/17), AngularJS, Redux, Hooks, Sagas, RxJS/NgRx, HTML5, CSS, JSON, RESTful Microservices, Hapi, Sequelize, XML, XSD, XSLT, jQuery, Web Services, WCF, SOAP, UDDI, ASMX, WSDL |
| **Development Tools & IDEs** | Visual Studio, IntelliJ IDEA, Visual Studio Code, WebStorm, PowerShell |
| **Version Control & Deployment** | Git, Bitbucket, SVN, Octopus Deploy, Azure DevOps, CI/CD DevOps pipeline, Jenkins |
| **Testing & Other Tools** | Jest, JOI validation, NUnit with Moq, Fluent Assertions, Visual Studio Unit Tests, SoapUI, Postman, Redis, Swagger, Splunk, ELK Stack, JIRA, Confluence, Maven, VMware, Grafana, Crucible, Single Sign-On (SSO), OAuth, SSL, Two-Factor Authentication (2FA), OAuth2, CSP, HSTS, SRI, CORS, SharePoint, Microsoft Teams, AppDynamics, SolarWinds |
| **ETL & Server Management** | Microsoft SQL Server Integration Services, SQL Server Reporting Services, ETL, Windows Server Management (Server Administration) IIS, EC2 |

# Work Experience

**Quest Diagnostics New Jersy**

**Role: Senior Full Stack Software Engineer August 2023 – Present**

Focused on the design, management and maintenance of an **AWS cloud native**, construction technology platform that optimizes equipment fleet operations by consolidating **IoT device data** (**GPS, Cellular, Bluetooth Low Energy, and QR technologies)** into a unified customer dashboard as a member of an **agile** team.

**Responsibilities:**

* **Led team** in enhancing and developing software services, improving functionality and performance through effective communication and collaboration using **Jira** for project management and task tracking.
* **Facilitated design sessions and peer code reviews** to enhance product quality, providing professional mentorship and fostering a culture of continuous improvement.
* **Architected scalable micro-frontends** using **Module Federation**, **JavaScript (ES2021)**, **TypeScript 4.5**, and frameworks like **React 18**, **Angular** (progressively upgraded from **version 12 to 17**), and **Google Maps API**, with front-end build processes managed through **Webpack 5** and **ESLint** for code quality.
* **Designed and built RESTful APIs** with **.NET 6**, handling complex business logic, robust backend services, and managing large-scale IoT data within the AWS cloud-native platform.
* **Developed lightweight, real-time services** using **Node.js 16** and the **Hapi framework** to efficiently manage IoT device data (GPS, Cellular, Bluetooth Low Energy, QR technologies), ensuring rapid data processing and integration into the customer dashboard.
* **Transitioned monolithic applications to microservices architecture** using **Docker**, **Kubernetes**, and message queuing frameworks like **RabbitMQ** and **Redis**, implementing an incremental migration strategy to ensure minimal downtime and maintain service continuity.
* **Developed and maintained a customer service tool** with **ASP.NET Core Web API** and **JavaScript**, prioritizing client needs and delivering solutions effectively.
* **Managed IoT data integration** from various devices (GPS, Cellular, Bluetooth Low Energy, and QR technologies) into a unified dashboard, optimizing equipment fleet operations.
* **Proficient in Amazon Web Services (AWS)**, focusing on **EC2**, **S3**, **VPC**, **Elasticsearch**, and **Kinesis**, while ensuring client satisfaction and operational efficiency.
* **Utilized Jest** testing framework for unit testing, maintained data integrity through **Joi** schema validation, and ensured thorough test coverage.
* **Experienced in developing and maintaining revenue management and point of sale systems**, optimizing transactions, pricing, sales analytics, and reporting.
* **Employed SSIS for ETL** and migrated client data to **AWS RDS** and **S3**, adapting to new technologies and methodologies to ensure smooth data operations.
* **Leveraged monitoring tools** like **Grafana**, **AppDynamics**, and **Papertrail** for operational efficiency and production support, demonstrating adaptability and resilience.

**ENVIRONMENT:** .NET 6, Node.js 16, Docker, JavaScript (ES2021), TypeScript 4.5, React 18, Redux, Hooks, Sagas, AWS (RDS, EC2, S3, VPC, Elasticsearch, Kinesis), RTK Query, RxJS/NgRx, RabbitMQ, Redis, Hapi framework, Sequelize, PostgreSQL 13, Grafana, AppDynamics, Papertrail, Google Maps API, Webpack 5, ESLint, Jira.

**Role: Full Stack Senior Software Developer. Nov 2021 – July 2022**

**Client: Integrity Spirit, Hyderabad, IN**

**Responsibilities:**

Designed, maintained, and supported the **Azure cloud-native** Workforce Solutions **data management pipeline**, which involved overseeing the process of **Extract, Transform, and Load (ETL)** migration.

**Responsibilities:**

* **Architected and deployed** a **Microservices** architecture using **ASP.NET Core**, leveraging **Azure Kubernetes Service (AKS)** with **Docker** containers to ensure scalability and resilience across applications.
* **Designed and developed** C# applications using **.NET Core 3.1**/**.NET 5** and **ASP.NET MVC 5**, building a robust data acquisition and transformation platform.
* **Implemented REST APIs** with **Entity Framework Core 3.1/5**, ensuring seamless integration and communication using **JSON**.
* **Led the development of micro frontends** using **JavaScript**, with frameworks like **AngularJS** and **Angular** (versions **7/8/10/12**), enhancing the user experience through iterative improvements.
* **Integrated dependency injection** with **Unity**, secured applications using **OAuth** with **Azure Active Directory (AD)**, and **conducted unit testing** using **NUnit** to ensure high code quality and maintainability.
* **Directed architecture discussions**, facilitated design sessions, and conducted code reviews to improve product quality, while also **mentoring junior team members** and fostering a collaborative development culture.
* **Migrated client data** to **Azure SQL Database** for structured data and **Azure Blob Storage** for unstructured data. Performed ETL processes using **SQL Server Integration Services (SSIS)** with multi-threading for enhanced efficiency, followed by reporting with **SQL Server Reporting Services (SSRS)**.
* **Collaborated with third-party data suppliers** to integrate various business solutions, including API integration, optimizing operational efficiency and data flow.
* **Supported applications** in both **production (PROD)** and **pre-production (Pre-PROD)** environments, ensuring system stability, performance, and rapid issue resolution.
* **Actively participated in Agile Scrum**, including sprint planning, daily stand-ups, and retrospectives, driving continuous improvement and iterative development.

**ENVIRONMENT:** C# .NET MVC, .NET Core 3.1/5, ASP.NET Core Web API, Azure (Azure Kubernetes Service (AKS), Azure Web App, Azure Functions, Azure Blob Storage, Azure SQL Database, Azure Active Directory (AD)), Entity Framework Core 3.1/5, REST, Node.js, Docker, JavaScript, TypeScript, AngularJS, Angular (7/8/10/12), Oracle, Dapper ORM, Redis, SQL Server Reporting Services (SSRS), SQL Server Integration Services (SSIS), OAuth Security, Dependency Injection, NUnit, SolarWinds, AppDynamics, Splunk ESLint, Jira.

**Role: Full Stack Software Developer II, Oct 2020 – October 2021**

**Client: Integrity Spirit, Bangalore, IN**

**Responsibilities**

The system is a robust, easy-to-use, **AWS cloud** native, rate and inventory management **SaaS application** that enables hoteliers to support a multitude of **rate, inventory, point of sale** and distribution strategies to achieve their business goals.

**Responsibilities:**

* Enhanced, maintained, and supported the **AWS cloud** native SynXis Central Reservations (CR) system using **agile** methodologies and project management skills for efficient delivery.
* Led the team in migrating GDS application data from **Oracle** to **Cassandra** (NoSQL) database, ensuring alignment with client requirements and business objectives.
* Designed **data routing and caching mechanism** for the next-gen GDS, combining architectural expertise with client feedback for optimal solutions.
* Developed products in **MVC ASP.NET** with **NUnit**, **Moq**, and **Fluent Assertions** for rigorous testing, supported by **Oracle**, **Microsoft SQL Server**, and **Cassandra**.
* Built XML Web Services using **C#**, **ASP.NET**, and **SOAP** while adapting to evolving project needs and implemented **WCF** and **ASMX** web services for seamless integration, documenting processes for effective collaboration.
* Designed and improved UI using **React**, **Redux**, **Angular**, **jQuery**, and **Kendo UI**, prioritizing user experience and client satisfaction.
* Participated in **architecture sessions**, **mentored junior members**, and embraced continuous learning to stay updated with the latest technologies.
* Skilled in designing and managing cloud-native **revenue management and point of sale systems**, enhancing **transaction processes, dynamic pricing**, and comprehensive reporting to drive business success.
* Automated test cases using **NUnit** with **Moq**, **MVC**, and **C#** to drive test automation and continuous improvement.
* Utilized **PL/SQL** for complex queries, **SSIS** for ETL tasks, and **SSRS** for creating and delivering reports, enhancing data visualization and client engagement.
* Wrote **UNIX** and **PowerShell** scripts to foster knowledge sharing and facilitate seamless application integration.

**ENVIRONMENT:** C#, ASP.NET, SOAP, HTTP, XML, XSLT, WSDL, WCF, ASMX web services, Oracle, SSRS, ETL, Cassandra, SSIS, PowerShell, PL/SQL, NUnit with Moq, MVC, Node.js, Docker, Kubernetes, React, Redux, JavaScript, TypeScript, AWS, AngularJS, Angular, Dynamo, Redis, Splunk, App Dynamics.

**Role: Full Stack Software Developer. January 2019 – September 2020**

**Client: Swift Safe, Hyderabad, India**

**Responsibilities:**

Cloud-native PMS designed to support hotels with daily operations, and revenue management with seamless tablet integration. Providing expedited check-in/ check-out process, **end-to-end tokenization with** **leading payment gateways,** facilitating enforcement of hotel chain-level configurations.

**Responsibilities:**

* **Built, maintained, and supported** the SynXis Property Manager, a robust **.NET application** in **C#**. Utilized **NUnit with Moq** and **Fluent Assertions** for comprehensive testing. Employed a **three-tier, client/server architecture** powered by **Oracle** and **Microsoft SQL Server** database within an **agile framework**.
* Initiated and **led efforts to identify, triage, and address** the production defect backlog promptly, demonstrating strong **problem-solving** and **incident management** abilities, reducing the backlog from over 1000 to 200 in just 2 months, showcasing strong **leadership** and effective backlog management.
* Collaborated with third-party (Infor) to **architect**, **implement, and maintain** an automated revenue management solution (EzRMS) for the Wyndham Hotel Chain, highlighting technical collaboration and **solution architecture** prowess.
* Developed and designed new features of the SynXis Property Manager, including **WCF** and **ASMX web services** integration, demonstrating expertise in **web service development** and **system integration**.
* Wrote **UNIX** and **PowerShell** scripts to foster knowledge sharing and facilitate seamless application integration.
* Worked extensively on enhancing the user interface of the SynXis Property Manager using modern technologies such as **Angular**, **jQuery**, **HTML5**, and **CSS**, ensuring an intuitive and user-friendly experience.
* Leveraged **SSRS** to create and deliver comprehensive reports to end clients, showcasing proficiency in **reporting and data visualization** to meet client needs effectively.
* Demonstrated proficiency in **agile methodologies** by utilizing **Scrum** and developing detailed **Use Cases**, **Sequence Diagrams**, and **Class Diagrams** in **UML** for effective project management and communication.
* Employed advanced database skills, including writing **complex queries** using **PL/SQL** and creating **Stored Procedures** and **triggers**, contributing to robust **database development** and optimization.
* Played a pivotal role in the **Migrations Project,** developing **database triggers, stored procedures, and functions,** and utilizing **SSIS** for **ETL processes** to facilitate seamless data migration and integration.

**ENVIRONMENT:** C#, ASP.NET, NUnit with Moq, Fluent Assertions, SSIS, SSRS, ETL, Microsoft SQL Server, Oracle, UML, SOAP, HTTP, XML, XSLT, WSDL, WCF, ASMX web services, Oracle, PL/SQL, MVC, AngularJS.