Madhu

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**Professional Summary**

Result-driven Principal Software Engineer with 10+ years of software development experience, including:

* 7 years of experience modernizing a legacy commercial real estate system written in C#, .NET Framework, and SQL Server to a SaaS product on AWS cloud using a microservices architecture. Actively contributed to defining the technical direction by developing proof of concepts using industry standards and new technologies.
* 1 year of data engineering experience on Azure cloud, where I developed a high impact serverless (Azure Functions) ETL platform developed in C#, .NET Core, and Azure SQL leveraging Azure Data Factory that accelerated the delivery of customizations to clients.
* Fintech startup experience developing an innovative stock recommendation web application for a Fintech startup on an event-driven architecture in Python, Dash Plotly, React, Next.js, and DynamoDB on the AWS cloud.
* Avid practitioner of clean architecture approach, i.e., principles like separation of concerns, loose coupling, dependency inversion, and domain-centric design.
* 4 years of leadership experience in top-tier technology consulting as a Technical Project Manager/Solutions Architect, driving analysis, design & implementation to deliver complex projects from inception to completion.
* Solid experience mentoring the team on Agile principles (SCRUM) and best practices like test-driven development and code reviews, achieving 85%+ code coverage through unit tests.

**Technical Skills**

* **Languages and frameworks:** C#, .NET Core, Python, Java, SQL, Dash Plotly, JavaScript, React, and Next.js.
* **Cloud Platforms:** Azure (Azure Functions, Storage account, Azure data factory, Azure AD, and Azure SQL) and AWS.
* **Queue-based and Event-driven architecture:** Cloud AMQP (RabbitMQ), SQS, and AWS EventBridge.
* **Containerization**: Docker and ECS
* **DevOps:** Terraform, AWS SAM, Python, PowerShell
* **CI/CD:** Azure DevOps, GitHub, and Jenkins
* **Databases:** MSSQL Server and DynamoDB (NoSQL).
* **Object Relational Mapping (ORM):** Entity Framework.
* **Test Frameworks:** NUnit, MSTest, NSubstitute, and JMeter
* **Other:** SCRUM, CI/CD, Behavior-driven development (BDD), Gherkin, Test-Driven Development (TDD), ETL, Power BI, and microservices.

**Professional Experience**

**Accruesafe (Fintech startup) Katy, TX**

**Architect and Principal Software Engineer Feb 2024 – Aug 2024**

* Architected a fundamental analysis-based stock recommendation web application, leveraging AWS technologies like Linux EC2, AWS EventBridge, Lambda, DynamoDB, and S3.
* I developed the web application in React and Next js and charts in Python and Dash Plotly, enhancing user experience and data visualization.
* I developed the backend as Python Lambdas, leveraging AWS EventBridge and external APIs to achieve scalability and schedule-driven invocation.
* I have implemented DevOps and security best practices using Terraform scripts for deployment and by using private VPC subnets.

**Altus Group (Fintech - Commercial Real Estate) Houston, TX**

**Senior Developer June 2016 – Feb 2024**

* Led the development of a high-impact serverless C#/.NET Core ETL platform leveraging Azure functions, Azure Data Factory, Azure storage, Power BI, on-premises data gateway, and S3 for use by app services consultants within the company to accelerate the delivery of customizations to clients. I designed and developed the database on Azure SQL.
* Modernized a distributed on-premise C#, .NET, MSSQL enterprise product to a SaaS product on AWS Cloud by developing highly available and performant customer-facing OAuth authorized C#/.NET Core Web APIs and workers as ECS containers with database on RDS SQL Server. We achieved a 100% customer conversion rate for this SaaS version of the product.
* We monetized the organization’s investments in Power BI by developing a provisioning workflow for workspaces initiated by Salesforce. This workflow triggers events in AWS EventBridge, which are processed by provisioning code written in C#/.NET Core AWS Lambdas, invoking Power BI APIs.
* Drove continuous process improvements by mentoring the team on Agile principles (SCRUM) and best practices like test-driven development and code reviews, achieving 85%+ code coverage through unit tests.
* I enhanced system reliability with CloudWatch-driven auto-scaling, resulting in 99.9% uptime.
* By implementing logging and observability in Datadog, we achieved a 50% decrease in troubleshooting level 3 support issues in the enterprise product.

**Avanade Houston, TX**

**Group Manager Aug 2012 – April 2016**

* I managed the delivery of multiple high-impact projects across various industries, including automotive, pharmaceuticals, and insurance.
* We delivered a solution that replaced an outdated mainframe system for dealer financial statement processing, reducing costs by 50% for Toyota vehicles and parts distributors.
* We achieved $2M annual savings for a client by implementing a Windows 8.1 Logon Assist Tool.
* Improved business operations with tailored EPM solutions, driving a 50% increase in project efficiency.

**Education**

**Oregon Health and Science University, Portland, OR MS in Management in Science & Technology**

**National Institute of Technology, Karnataka, India BS in Computer Engineering**

**Professional Recommendations**

**See** [**https://www.linkedin.com/in/madhuvanesh/details/recommendations/**](https://www.linkedin.com/in/madhuvanesh/details/recommendations/) **for recommendations.**

**Certifications and Courses**

**AWS Certified Solutions Architect – Associate Issued on: April 2022, Expires on April 2025**

**Certified Scrum Master (CSM) Issued on: Aug 2023, Expires on Aug 2025**