

# Prudhvi Bharadwaja Male

✉ prudhvi.maale@gmail.com ☎ +1(336)944-8921 🌐 GitHub 📖 StackOverflow 🔗 LinkedIn 🌐 MyPortfolio

## PROFESSIONAL SUMMARY

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- **Technical Architect and Senior Software Engineer** with **8+ years of experience** building scalable, cloud-native AI applications across fintech, SaaS, and telecom domains.
- **Strong background in AWS-based architectures**, including **microservices, serverless, and event-driven systems**.
- **Proven team lead** with experience at **TIAA, Bank of America, Microsoft, and Volvo**, driving **performance, reliability**, and **cost optimization**.
- Well-versed in **DevOps practices**, including **Git, Azure DevOps**, and configuring **CI/CD pipelines**. Effective in **Agile** environments utilizing tools such as **Jira** and **TFS**.
- Co-founded **TechSudoku LLP**, where I **led a cross-functional team** and delivered cloud-native SaaS platforms for state government clients across India.

## SKILLS

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**Languages:** C#, TypeScript, Python

**Frameworks & Libraries:** ASP.NET Core, .NET Framework 4.8, Node.js, Angular, React.js, Express.js, Node.js, JavaScript, HTML, CSS, Bootstrap, Swagger UI, OpenID Connect, Docker, xUnit, Git, Entity Framework Core (EF Core), Agile, AJAX, Electron.js, Angular Material UI, Web API, SignalR, Model-View-Controller (MVC), Gulp, Bower, HIPAA Compliance, Terraform.

**Management Skills:** People Management, Agile Leadership, Team Management, Service Delivery, Budget Management, Business Analysis, IT Strategy, Project Management, Risk Management, Change Management, Process Improvement.

**Tools:** Visual Studio 2022, Visual Studio Code, Wireshark, Docker Desktop, Power BI, Microsoft Project, SQL Server Management Studio (SSMS), DebugDiag, WinDbg Next, Windows Performance Analyzer, Team Foundation Server (TFS), Azure Management Studio, LaTeX Studio, GitHub, Bitbucket, Jira, Ansible, Azure DevOps.

**Databases:** Microsoft SQL Server, MongoDB, MariaDB, Azure Cosmos DB, Amazon DynamoDB, Azure Cache for Redis.

**Cloud Technologies:** Microsoft Azure, Amazon Web Services (AWS), EC2, Elastic Beanstalk, Amazon S3, Amazon VPC, Amazon SQS, Amazon IAM, AWS Lambda, Amazon SNS, Azure Front Door, Azure App Service, Azure Functions, Azure Service Bus, Azure Kubernetes Service (AKS), Azure Key Vault, Traffic Manager, Azure API Management (APIM), Azure Entra.

**Others:** Azure OpenAI, RAG Architecture, Prompt Engineering, AI Governance, T-SQL, PL/SQL, Time Travel Debugging (TTD), IIS, JSON, JWT, Kusto Query Language (KQL), Hangfire, API Gateway, Test-Driven Development (TDD).

## PROFESSIONAL EXPERIENCE

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**TIAA, Solutions Architect**

Sep 2025 – Present | Charlotte, USA

- Led the integration of **Azure Entra Single Sign-On (SSO)** for an enterprise **ASP.NET Core** and **Angular** application, migrating from legacy **NTLM-based authentication**.
- Architected a **RAG-based, agentic chat solution** enabling internal users to query real-time status of Cybersecurity feature development requests via natural language, significantly improving response turnaround times by approximately 50%.
- Engineered **Pinecone-powered vector search (cosine similarity)** and applied **PCA-based dimensionality reduction** to transform complex request data into actionable **Power BI dashboards**.
- Integrated **SonarQube** for continuous static code analysis, proactively identifying code smells, vulnerabilities, and technical debt, resulting in a **70% improvement** in overall **code quality**.
- Pioneered the adoption of **Test-Driven Development (TDD)** practices within the team, improving development velocity.
- Established a comprehensive **unit testing framework** for an existing production application using **xUnit, Moq, and Fluent Assertions**, significantly increasing test coverage.
- Took ownership of **Agile delivery**, facilitating daily Scrum calls, managing sprint execution using **Azure Boards**.
- Architected and implemented the **Unit of Work design pattern** in a centralized internal application used to track **support and feature development requests** across multiple teams.

**Bank of America, Senior Software Engineer**


Mar 2024 – May 2025 | Charlotte, USA


- Engineered a **Blazor** web application tailored for **Enterprise Stress Testing**, resulting in a 17% quarterly productivity increase across other teams.
- Designed and developed **reusable components** in a **Blazor MVC** application, implementing SOLID principles to boost code maintainability and integrated WebSockets for real-time data updates, enabling efficient quarterly reports.

- Implemented **Test-Driven Development (TDD)** practices to write **xUnit** tests concurrently with code implementation, resulting in 51% reduction in regression bugs and a significant 86% improvement in **code coverage**.
- Automated Azure infrastructure provisioning using **Terraform**, reducing deployment and centralized microservice access through **Azure API Management (APIM)**, reducing deployment errors and improving **API observability**.
- Developed **Python** scripts to streamline **build** and **release pipelines**, reducing build time by 40%.
- Utilized **Windows Profiler Trace Analyzer** to identify bottlenecks in the application code, subsequently modifying the code to enhance overall **performance** by approximately 25%.

**TechSudoku LLP**, *Founder*


Jul 2022 – Nov 2023 | Remote, USA

- Led development of a **cloud-native SaaS platform** using **.NET Core**, **Angular**, **Docker**, and **Terraform**.
- Designed and optimized **cloud infrastructure**, achieving **42% reduction in maintenance costs** and **\$92K+ annual savings** for a government client.
- Integrated **telecom systems (Asterisk PBX)** for **real-time call tracking** and **analytics at scale**.
- Developed **FridgeSense** , a **GPT-3.5 Turbo**-based AI tool using **OpenAI APIs** and **prompt engineering** to analyze food images and suggest recipes, demonstrating applied understanding of AI systems.

**Volvo Group** , *Software Development Engineer*

May 2023 – Aug 2023 | Greensboro, USA

- Pioneered a pivotal **ASP.NET Core** application, revolutionizing truck parts tracking and enhancing team productivity. Seamlessly integrated with **Amazon DynamoDB**, fortifying security measures and mitigating 300+ security incidents.
- Built **minimal APIs** in **.NET 6** to generate **VINs** from order confirmations, sending data to **Amazon Simple Queue Service (SQS)** for topic-based consumption.
- Initiated the **migration** of legacy **.NET** based applications from **ASP.NET 4.7** to **ASP.NET Core 7.0** on a fully **managed AWS** platform using **Elastic Beanstalk** and **EC2**, achieving substantial cost savings (59%) and improved performance.
- Engineered a **microservice** within a **Node.js** based application to generate Vehicle Identification Numbers (VIN) for newly manufactured trucks and hosted on **AWS Lambda**.
- Deployed microservices using Kubernetes on **Amazon Elastic Kubernetes Service (EKS)**, reducing deployment time and improving system uptime during updates by approximately 30% through efficient container orchestration.

**Microsoft** , *Senior Software Engineer*

Feb 2020 – Jul 2022 | Hyderabad, India

- Developed multiple components in Diagnose & Solve Problems blade using **ASP.NET Core**, **Python** and **Kusto Query Language (KQL)**, enhancing diagnostic capabilities for customers using **Windows AppService Plans**.
- Created **Detectors** for the internal tool **AppLens** using **KQL**, fetching data from the Master Data Management (MDM) metrics database and improving the tool's ability to **identify and address issues efficiently**.
- Developed multiple **Angular** components for **Azure Support Center** to manage customer incident workflows, streamlining communication between support engineers and product owners, and improving solution delivery rate by 20%.
- Implemented **Azure Active Directory (AAD)** authentication with **token-based Single Sign-On (SSO)** and exposed internal diagnostics APIs through **Azure API Management (APIM)**, improving secure access and observability.
- Utilized **Azure Kubernetes Services (AKS)** to orchestrate containerized diagnostic tools in production environments, achieving 99.9% availability, reducing infrastructure costs, and enabling **rapid scaling** during traffic spikes using **Terraform**.
- Authored and presented numerous training sessions to **Microsoft's global teams**, delivering **advanced (300+) level** content on **CLR**, **ASP.NET**, **IIS**, and **Azure App Services**, focused on product understanding and debugging techniques.

**KFin Technologies**, *Executive*

Jan 2017 – Jan 2020 | Hyderabad, India

- Built a centralized staff management system for the **Government of Education, New Delhi**, using **ASP.NET Core**, **React.js**, and **Redux** for state management, automating attendance tracking and reducing administrative errors by 40%.
- Dynamically marked user locations on **Google Maps** using **SignalR** and **web sockets**, and reduced **bundle size** with **Bower** and **Gulp**, resulting in faster deployment speeds and enhanced application efficiency.
- Created **ASP.NET Core Web APIs**, enabling a mobile app to assign work to field agents and improving delivery time by 30%.
- Implemented **Hangfire** for **CRON jobs**, resulting acceleration in data retrieval and task management efficiency.
- Refactored **SQL Server stored procedures** and restructured **indexing strategies** to improve data retrieval speeds.
- Migrated code to **Azure DevOps** for efficient delivery pipelines, and containerized applications with **Docker**, leading to reduction in maintenance workloads.


## EDUCATION

**Masters in Information Technology**, *University of North Carolina at Charlotte*

Aug 2022 – Dec 2023 | Charlotte, USA

- Related coursework: Network Based Application Development, Database Systems, Software System Design and Implementation.

## CERTIFICATES

- Azure Fundamentals 
- Azure Data Fundamentals 
- Azure AI Engineer Associate 