

# Prasad Sudhir Rane

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## PROFESSIONAL SUMMARY

Seasoned .NET Developer with 10 years of experience, specializing in the design and development of scalable, resilient backend systems. I have deep expertise in **C#, ASP.NET Core, Angular (TypeScript), SQL, and AWS cloud-native microservice** architectures, with a focus on delivering high-performance solutions. My approach is centered on writing clean, maintainable code, while collaborating effectively in an **Agile environment** with a high degree of independence.

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## TECHNICAL SKILLS

**Languages:** C#, SQL, TypeScript, JavaScript, Java, HTML, CSS/SCSS

**Frameworks: Libraries:** .NET 8, ASP.NET Core Web API, Entity Framework, GraphQL (Hot Chocolate), Angular 18, NgRx

**Cloud & DevOps:** AWS (Lambda, SQS, SNS, S3, CloudWatch), Terraform, CircleCI, GitHub Actions, Jenkins

**Databases:** MS SQL Server, MySQL, AWS DynamoDB (noSQL)

**Testing:** Jasmine, Karma, Playwright, xUnit, MSTest, Moq

**Tools & Methodologies:** ADO, Postman, Insomnia, Fiddler, Git, Agile/Scrum, TDD, Microservice architecture

**Observability & Incident Management:** Splunk, Dynatrace, PagerDuty, ServiceNow, JIRA

**IDEs:** Visual Studio, VS Code, JetBrains Rider, Nitro, MySQL Workbench

**AI Tools & Platforms:** GitHub Copilot, Claude Code, AWS Bedrock (Claude Sonnet), MCP, Generative AI Concepts

**Working Knowledge:** React, Python, R, Tableau

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## PROFESSIONAL EXPERIENCE

### **Rocket Mortgage / Software Engineer / Lake Bluff, Illinois | Jan 2023 – July 2025**

- Engineered an AI-powered loan information chatbot using **Amazon Bedrock (Claude Sonnet)** and **AWS Lambda**, which orchestrated multiple existing **ASP.NET Core APIs** to process natural language queries and synthesize data
- Seamlessly integrated AI chatbot into an Angular web application, reducing manual lookup time by ~30%
- Upgraded a legacy Angular 14 application to **Angular 18**, refactoring the **TypeScript** codebase with modern Angular features such as standalone components, enhanced control flow, and zone-less change detection, significantly improving performance, maintainability, and developer productivity
- Designed normalized **SQL** database tables, wrote complex stored procedures, and integrated them into .NET applications using **Entity Framework** for efficient CRUD operations and business workflows
- Optimized the performance of the loan application processing system by implementing a new **GraphQL** query endpoint with a Hot Chocolate server, reducing over-fetching, and improving query response time by 60%
- Utilized AI tools - **GitHub Copilot & Claude Code** to accelerate development and improve productivity by ~20%
- Implemented messaging queue **Amazon SQS** for decoupled service communication and **Amazon SNS** for real-time event notifications, improving system resilience and asynchronous processing. This resulted in a 15% reduction in customer support inquiries and enhanced user experience
- Managed and provisioned AWS cloud infrastructure (Lambda, SQS, S3, DynamoDB) using **Terraform**, ensuring consistent and automated deployments. Integrated **CI/CD pipelines** via **CircleCI** for faster releases
- Led technical design discussions, documented architectural decisions, and delivered testable tasks with comprehensive Unit Test coverage (averaging 90%+). Led a team of 2 engineers, providing technical guidance on

architectural patterns, front-end best practices and rigorous code reviews, significantly accelerating their skill development and empowering them to contribute to complex features

- Collaborated with business analysts and vendor teams in an **Agile environment**, participating in daily standups, sprint planning, and retrospectives to align cross-functional teams on integration priorities; iteratively refined requirements and delivered scalable integration solutions within sprint cycles

#### **London Computer Systems / Software Developer / Cincinnati, Ohio / Dec 2019 – Jan 2023**

- Led migration of a windows desktop applications into **Angular 12** web applications, implementing TypeScript-based architecture with **RxJS** for reactive communication and **NgRx** for predictable, centralized state management.
- Architected and implemented lazy-loaded feature modules with route guards and resolvers
- Spearheaded the complete lifecycle of multiple application features, including database design (**MS SQL, MySQL**), **ASP.NET GraphQL/REST API** development
- Leveraged **Angular Material** library for faster development, consistent and responsive UI
- Built live dashboards with **SignalR** and Angular subscriptions for real-time updates
- Designed and deployed a reusable SignalR framework for the core business application, enabling real-time features like issue status updates, watch alerts, and user activity tracking, improving response times for critical alerts by 25%
- Collaborated with cross-functional teams, performed rigorous code reviews, and guided junior developers. Actively drove solution discussions and contributed to architectural decisions

#### **EXFO Electro Optical Engineering / Software Developer / Pune, India / Mar 2015 – Jun 2018**

- Developed **ASP.NET MVC**-based Web APIs using **TDD** and optimizing CI/CD pipelines with **Jenkins**
- Designed and implemented a custom Test Complete framework, automating 70% of UI tests. Reduced manual testing efforts by over 60%, accelerating release cycles and improving product quality
- Delivered detailed architecture mockups and functional prototypes during planning and design phases, facilitating early feedback and risk mitigation

#### **Tanish Infotech Solutions / Software Developer / Pune, India / Mar 2014 – Feb 2015**

- Built web and desktop applications on the **.NET** framework
- Documented software requirements through direct client engagement

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## EDUCATION

### **Masters of Science in Information Systems**

**University of Cincinnati / Cincinnati, Ohio / Aug 2018 – Dec 2019**

### **Bachelors of Engineering in Electronics & Telecommunication**

**University of Pune / Pune, India / Aug 2009 – May 2013**