

SIVA KUMAR

Senior Software Engineer | .NET / Backend | Microservices | AI-Augmented Engineering

Thiruvananthapuram, Kerala, India

kcsiva@gmail.com | linkedin.com/in/siva-kumar-087701b5

PROFESSIONAL SUMMARY

Senior Software Engineer with **10+ years of experience** building, modernizing, and supporting production software, with a strong focus on **C#, .NET, ASP.NET Core, REST APIs, microservices, and backend engineering**.

Experienced in working across the full lifecycle of complex systems — from implementing new functionality and service integrations to **production debugging, root-cause analysis, reliability, performance improvements, and system modernization**.

Hands-on experience with **SQL Server, MongoDB, RabbitMQ, Azure DevOps, CI/CD, GraphQL, and distributed systems**. Comfortable working across application, API, database, messaging, and deployment layers to understand problems end-to-end and deliver reliable solutions.

Currently expanding into **AI-assisted and agentic software development within the .NET ecosystem**, using tools such as Cursor and exploring MCP and API/LLM integration to improve real-world engineering workflows.

TECHNICAL SKILLS

Languages:

C#, SQL

Microsoft Technologies:

.NET, .NET Core, ASP.NET Core, Web API

Architecture & Backend:

Microservices, REST APIs, Distributed Systems, Service Integration, Event-Driven Systems

Databases:

SQL Server, MongoDB

Messaging & Integration:

RabbitMQ, GraphQL, Camunda

Cloud & DevOps:

Azure, Azure DevOps, CI/CD, Git, Swagger/OpenAPI, Postman

Frontend:

Angular

AI & Modern Engineering:

Cursor, AI-Assisted Development, Agentic .NET Development, MCP Concepts, OpenAI API Integration

Engineering Practices:

Production Debugging, Root-Cause Analysis, Reliability Engineering, Performance Optimization, System Modernization, Technical Problem Solving

PROFESSIONAL EXPERIENCE

PIT Solutions

Senior Software Engineer

August 2020 – Present | Thiruvananthapuram, Kerala, India

- Develop and support backend services and APIs using **C#, .NET/.NET Core, ASP.NET Core, SQL Server, and MongoDB** across production systems.
 - Investigate production incidents and complex application behaviour, perform **root-cause analysis**, and implement safe fixes with attention to reliability and downstream impact.
 - Work with **microservices and distributed components** using REST APIs and RabbitMQ-based messaging while maintaining established service boundaries.
 - Contribute to modernization of established backend systems by introducing newer service capabilities without unnecessarily disrupting existing APIs, data flows, and business behaviour.
 - Work with **Azure DevOps and CI/CD workflows** for development, deployment, troubleshooting, and production support across multiple environments.
 - Contribute to the integration of **Manuscript Content Service (MCS)** capabilities into an existing Review API, consuming manuscript information through **GraphQL** while preserving existing SQL/MongoDB responsibilities and fallback behaviour.
 - Work on production-facing functionality where changes need to balance **new feature requirements, system reliability, backward compatibility, and operational safety**.
 - Use **Cursor and AI-assisted development techniques** to improve coding, debugging, API exploration, documentation, and day-to-day engineering workflows.
 - Explore practical **agentic .NET development, MCP concepts, and API/LLM integration**, with a focus on applying AI to real software-engineering problems.
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ISER Global Solutions Private Limited

Senior Software Engineer

December 2018 – August 2020 | Kerala, India

- Developed and maintained software solutions using **Microsoft .NET technologies, APIs, and database-backed application components**.
- Worked across feature development, debugging, and production support, resolving application issues and delivering maintainable fixes.
- Collaborated with cross-functional teams to understand requirements, implement functionality, and troubleshoot technical issues throughout the development lifecycle.

- Participated in maintaining and enhancing existing applications while balancing new development with production stability.
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AITS

Senior Software Engineer

May 2015 – December 2018 | Thiruvananthapuram Area, India

- Developed and maintained software applications using **Microsoft .NET technologies**, with responsibility across application logic, integrations, and database interaction.
 - Investigated application defects and technical issues, implemented fixes, and supported production-oriented development activities.
 - Worked collaboratively across the software development lifecycle to deliver functionality and maintain existing applications.
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XStream Software

Software Engineer

September 2009 – April 2015 | India

- Started professional software engineering career developing applications and backend functionality using **Microsoft .NET technologies**.
 - Built hands-on experience in application development, database integration, debugging, maintenance, and defect resolution.
 - Worked across implementation, testing, and production-support activities while developing a strong foundation in software engineering practices.
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SELECTED ENGINEERING HIGHLIGHTS

MCS / Service Integration

Contributed to integrating **Manuscript Content Service (MCS)** capabilities into an established Review API, using GraphQL to retrieve manuscript information while maintaining existing system responsibilities and fallback behaviour.

Production Reliability & Troubleshooting

Regularly work on **production incidents, data fixes, application debugging, and system behaviour analysis**, tracing issues across APIs, services, databases, and asynchronous components.

System Modernization

Experience improving established systems incrementally, introducing newer capabilities while considering **backward compatibility, existing data flows, production behaviour, and operational safety**.

AI-Augmented Development

Building practical experience with **Cursor, AI-assisted coding, agentic .NET development, MCP concepts, and API/LLM integration**, applying AI to actual software-engineering workflows.

End-to-End Engineering

Comfortable moving beyond a single code layer and working across **application logic, APIs, databases, messaging, deployment pipelines, and production environments** to understand and solve engineering problems.

EDUCATION

Bachelor of Engineering (B.E.) – Computer Science and Engineering

S. Veerasamy Chettiar College of Engineering

2002 – 2005

Diploma – Computer Technology

Govt. Poly technic Nedumangad, Trivandrum

1996 – 1999

THSLC – Electronics

Technical High School Trivandrum

1996 – 1999
