

Nikesh Kumar

Lead Engineer | Software Architect | Data & AI Engineer

nikesh_kumar@hotmail.com | +91 9916134333
https://nikeshksingh.github.io/ | https://www.linkedin.com/in/nikeshkumar09/

PROFILE

Experienced software engineer focused on scalable backend systems, APIs, microservices, and distributed platforms. Currently extending that foundation into Python, data engineering, data science, AI, and machine learning.

CORE EXPERTISE

PROGRAMMING
C#, Python, SQL, SQL / NoSQL, JavaScript, TypeScript

BACKEND
.NET, .NET Core, ASP.NET Core, Web API, REST APIs, Microservices, Architecture

DISTRIBUTED SYSTEMS
Redis, SignalR, Kafka, RabbitMQ, Pub/Sub, Event-driven architecture

CLOUD & DEVOPS
Azure, Docker, Kubernetes, Git, CI/CD, GitHub Actions, Azure DevOps

DATA & AI
Python, Pandas, NumPy, Jupyter, Machine Learning, Data Science, Generative AI, AI Agents

PROFESSIONAL EXPERIENCE

Lead Engineer - Design & Development June 2018 to present
Siemens Healthcare

Lead Engineer working on the Atellica Solution immunoassay and clinical chemistry analyzer platform, including the current Griffin cloud-native Laboratory Informatics project.

- Lead the design and development of ASP.NET Core microservices and BFF services supporting laboratory, patient, sample, and quality control workflows.
- Design secure REST APIs with OpenAPI contract-first architecture and integrate laboratory middleware systems.
- Build distributed caching and asynchronous processing with Redis and SignalR, and support containerized deployments with Docker, Kubernetes, and Azure DevOps.
- Analyze software requirements, manage scope and estimates, coordinate with global teams, review code, mentor engineers, and support production systems.

STACK C#, .NET 8, ASP.NET Core, Microservices, OpenAPI, EF Core, SQL Server, Redis, SignalR, Keycloak, OAuth2/OIDC, JWT, Angular, TypeScript, RxJS, NgRx, Docker, Kubernetes (AKS/k3s), Azure DevOps, xUnit/NUUnit

Lead Engineer

Schneider Electric

July 2017 to June 2018

Worked on SoMove, user-friendly PC setup software for configuring, starting, and maintaining Schneider Electric motor control devices.

- Performed requirements analysis, solution design, coding, documentation, unit testing, debugging, and bug fixing.
- Managed build processing and ensured timely delivery and release management.

STACK C#/.NET, Web API, Angular, SQL Server 2008, LINQ, Visual Studio 2015-2017

Senior System Engineer

Siemens Technology and Service Private Limited

August 2014 to July 2017

Worked on WPMC-SM, the Security Management subsystem for wind park networks, providing user management, authentication, access rights, and security logging.

- Performed requirements analysis, solution design, coding, documentation, unit testing, debugging, and bug fixing.
- Managed build processing and ensured timely delivery and release management for security-management functionality.

STACK WCF, Web API, C#/.NET, Entity Framework, LINQ, SQL Server 2008, Visual Studio 2010/2012/2015

Senior System Engineer

Infosys Limited

July 2013 to August 2014

Worked on Microsoft projects including NGVL Licensing Content Store and PMC, supporting Azure-based content management and partner membership workflows.

- Performed requirements analysis, solution design, coding, documentation, unit testing, debugging, and bug fixing.
- Managed build processing, delivery and release management, and client communication.

STACK C#/.NET, ASP.NET MVC, SQL Server 2012, Web Services, Entity Framework, HTML5, jQuery, Windows Azure, CSS

Software Engineer

Nerve Centrex Software (India) Pvt. Ltd.

February 2012 to May 2013

Worked on Amlooking4, a search engine for businesses, people, products, and solutions with online, telephonic, SMS, and mobile-app channels.

- Participated in requirements gathering, application design, coding, and testing activities.
- Designed the application database using Oracle 10g and worked on web services and browser-based functionality.

STACK C#/.NET, ASP.NET, Oracle 10g, Ajax, JavaScript, Web Services, Windows XP

SELECTED PROJECTS

Griffin | Cloud-native Laboratory Informatics platform

A Siemens Healthineers platform providing laboratory workflow management, vendor middleware integration, real-time data processing, and microservice-based healthcare solutions.

ARCHITECTURE Cloud-native microservices and BFF services using OpenAPI contract-first APIs, distributed caching, asynchronous processing, secure identity, and containerized Kubernetes deployments.

- Led the design and development of scalable microservices and BFF services for laboratory workflows.
- Implemented secure REST APIs, distributed caching, asynchronous processing, and SignalR-based real-time communication.

STACK C#, .NET 8, ASP.NET Core, Microservices, OpenAPI, Entity Framework Core, SQL Server, Redis, SignalR, Keycloak, OAuth2/OIDC, JWT, Angular, TypeScript, RxJS, NgRx, Docker, Kubernetes (AKS/k3s), Azure DevOps

Atellica Solution | Immunoassay and clinical chemistry analyzers

A flexible, scalable, automation-ready analyzer solution combining immunoassay and clinical chemistry workflows with advanced sample-management technology.

ARCHITECTURE Service-oriented analyzer software with Hydra Instrument Service, Maintenance Manager, SIM, and DML communication mechanisms.

- Developed features for the Hydra Instrument Service and Maintenance Manager modules and maintained them across analyzers.
- Analyzed requirements with the Siemens Healthcare Diagnostics USA team and designed solutions for new requirements.

STACK C#/.NET, Web API, Microservices, Angular, SQL Server 2008, LINQ, Visual Studio 2019-2022

SoMove | Motor control device setup software

PC software for configuring, starting, and maintaining Schneider Electric motor control devices.

ARCHITECTURE Desktop setup application backed by Web API services and Angular user interfaces.

- Owned requirements analysis, design, implementation, testing, debugging, bug fixing, and release management.

STACK C#/.NET, Web API, Angular, SQL Server 2008, LINQ, Visual Studio 2015-2017