









RIFAT ERDEM SAHIN



SENIOR SOFTWARE DEVELOPER | CLOUD-NATIVE APPLICATIONS & DISTRIBUTED SYSTEMS

-  **Location:** Cambridge, CB1 1BB, United Kingdom
 -  **Citizenship:** British
 -  **Email:** contact@rifaterdemsahin.com
 -  **Phone:** +44 7848 024173
 -  **LinkedIn:** [linkedin.com/in/rifaterdemsahin](https://www.linkedin.com/in/rifaterdemsahin)
 -  **GitHub:** github.com/rifaterdemsahin
 -  **Portfolio:** <https://rifaterdemsahin.com>
 -  **Schedule a Call:** <https://calendly.com/rifaterdem/schedule>
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PROFESSIONAL SUMMARY


Senior Software Developer with 10+ years of experience designing and delivering **scalable, cloud-native applications and distributed systems** across financial services, healthcare, and enterprise consulting. Expert in full software development lifecycle from architecture design through to production deployment. Proven track record building high-throughput backend services, leading engineering teams, and driving 300% productivity improvements through clean code practices, automation, and modern cloud architectures. Passionate about mentoring developers and championing engineering excellence.

CORE COMPETENCIES

-  **Software Development & Architecture** - Distributed systems and microservices design - RESTful and GraphQL API development - Event-driven architecture with Kafka and message queues - Clean Code, SOLID principles, and Domain-Driven Design (DDD)
-  **Cloud-Native & DevOps** - Cloud application development on Azure, AWS, and GCP - Containerisation with Docker and Kubernetes (AKS, EKS) - CI/CD pipeline design with Azure

DevOps and GitHub Actions - Infrastructure as Code with Terraform and Bicep

 **Data & Integration** - Relational databases: PostgreSQL, SQL Server, MySQL - NoSQL: MongoDB, Redis, Cosmos DB, Cassandra - ETL pipelines and real-time stream processing (Kafka, Azure Event Hubs) - Third-party API and enterprise system integrations

 **Engineering Leadership** - Technical mentorship and code review culture - Agile/Scrum delivery and cross-functional team collaboration - Stakeholder communication and technical documentation - Hiring, onboarding, and growing engineering teams

KEY ACCOMPLISHMENTS

2025 | IBM | London, UK

Enterprise AI-Powered Platform Development - Challenge: Build a scalable enterprise software platform integrating AI capabilities for Fortune 500 clients across financial and government sectors - **Solution:** Architected and led development of a cloud-native microservices platform on Azure Kubernetes Service and IBM Cloud, integrating IBM watsonx AI for intelligent automation, with event-driven messaging via Azure Event Hubs and Apache Kafka - **Impact:** - 300% improvement in developer productivity through reusable platform services and automated CI/CD pipelines - 35% reduction in operational overhead via AI-driven workflow automation - Zero-downtime deployments for mission-critical workloads serving 2M+ daily users - **Technologies:** Java, Python, Node.js, Azure Kubernetes Service, Kafka, Azure Event Hubs, PostgreSQL, Cosmos DB, GitHub Actions, IBM watsonx AI

2024 | Goldman Sachs | Muscat, Oman

High-Performance Financial Transaction Platform - Challenge: Redesign a legacy batch transaction system struggling with volume, latency, and regulatory reporting requirements - **Solution:** Led a team of 8 developers to build a real-time event-driven transaction processing engine using Kafka streams, backed by a horizontally scalable microservices architecture on Kubernetes - **Impact:** - Reduced transaction processing time from T+1 (24 hours) to real-time (under 200ms) - Prevented £500k+ in fraudulent transactions via real-time anomaly detection - 99.99% availability SLA achieved through geo-redundant Azure deployment - Migrated 15TB of historical data with zero downtime - **Technologies:** Java Spring Boot, Kafka, Azure AKS, PostgreSQL, Redis, Terraform, Azure DevOps

2023 | Ypsomed | Switzerland

Healthcare IoT Data Processing Platform - Challenge: Scale a medical device data ingestion and processing system to handle 10x growth in connected IoT devices under ISO 13485 and GDPR requirements - **Solution:** Rebuilt the data pipeline as a cloud-native Azure solution with real-time stream processing, automated data validation, and a RESTful API layer serving mobile and web applications - **Impact:** - 40% improvement in data processing throughput supporting 500k+ connected devices - 35% reduction in infrastructure costs through Azure right-sizing and autoscaling - Full GDPR compliance achieved with automated data lineage and audit trails - **Technologies:** Python, Azure Functions, Azure Event Hubs, Cosmos DB, PostgreSQL, Docker, Kubernetes, Terraform

2022 | Cushman & Wakefield | Global

Real Estate Digital Platform Modernisation - Challenge: Modernise a monolithic property management application into a scalable, maintainable platform supporting global operations - **Solution:** Designed and led the strangler fig migration of the monolith to microservices, introducing a GraphQL API gateway, event sourcing, and a React-based front end consuming backend services - **Impact:** - Reduced time-to-feature from 6 weeks to 5 days through decoupled microservices and automated pipelines - 25% reduction in hosting costs via cloud-native Azure migration - Improved developer NPS from 32 to 78 through better tooling and documentation - **Technologies:** C#/.NET, Node.js, GraphQL, React, Azure App Service, SQL Server, Redis, GitHub Actions

TECHNICAL EXPERTISE

Languages & Frameworks

Primary: Python, Java, C#/.NET, Node.js/TypeScript

Secondary: Go, Bash/Shell scripting

Frontend: React, Angular (API integration)

Frameworks: Spring Boot, FastAPI, Django, ASP.NET Core, Express.js

Data & Messaging

Relational: PostgreSQL, SQL Server, MySQL

NoSQL: MongoDB, Redis, Azure Cosmos DB, Cassandra

Streaming: Apache Kafka, Azure Event Hubs, RabbitMQ

Search: Elasticsearch, Azure Cognitive Search

Cloud & Infrastructure

Platforms: Azure (primary), AWS, GCP

Containers: Docker, Kubernetes (AKS, EKS), Helm

IaC: Terraform, Bicep, ARM Templates, Ansible

CI/CD: Azure DevOps, GitHub Actions, GitLab CI/CD, ArgoCD

Monitoring: Azure Monitor, Application Insights, Prometheus, Grafana, ELK Stack

Engineering Practices

Test-Driven Development (TDD) | Domain-Driven Design (DDD) | Clean Architecture
SOLID Principles | Design Patterns | Event Sourcing & CQRS | REST & GraphQL APIs
Agile/Scrum | Code Review | Technical Documentation | System Design

PROFESSIONAL EXPERIENCE HIGHLIGHTS

Senior Software Developer / AI Solutions Architect | January 2025 - Present

IBM | London, UK

- Leading development of enterprise-scale cloud-native software platforms on Azure and IBM Cloud for Fortune 500 clients
- Architecting microservices using Java Spring Boot, Python FastAPI, and Node.js, deployed on AKS with Helm charts
- Integrating IBM watsonx AI capabilities into enterprise applications, enabling intelligent automation at scale
- Building and owning CI/CD pipelines via GitHub Actions and Azure DevOps serving 500+ developers globally
- Conducting architecture reviews and code reviews, mentoring a team of 12 developers across 3 time zones
- Driving adoption of TDD and clean code practices, reducing bug rate by 40% across delivery teams

Senior Software Developer / Technical Lead | 2020 - 2025

Goldman Sachs, Ypsomed, Cushman & Wakefield

- Led software development initiatives across finance, healthcare, and real estate sectors, managing teams of 5-10 developers
- Designed and delivered event-driven microservices supporting millions of daily transactions with sub-200ms latency
- Established engineering best practices: coding standards, peer review processes, automated testing frameworks, and runbooks
- Drove platform modernisation from monolithic legacy applications to cloud-native microservices on Azure
- Mentored junior and mid-level developers, contributing to 4 promotions within the team
- Delivered solutions achieving 300% improvement in deployment frequency and 30% infrastructure cost reduction

Software Developer | 2016 - 2020

Microsoft, Emerson, Various Fortune 500

- Built enterprise software solutions for large-scale digital transformation programmes on Microsoft Azure and AWS
- Led cross-functional squads designing and shipping scalable backend services and REST APIs
- Established automated testing frameworks (unit, integration, E2E) reducing regression incidents by 60%
- Championed Agile/Scrum adoption across engineering teams through workshops and coaching
- Evangelised clean code and DevOps culture through internal tech talks and brown-bag sessions

EDUCATION




Bachelor of Science

Southern New Hampshire University, USA  | 2013

CERTIFICATIONS & CONTINUOUS LEARNING

 **Microsoft Certified: Azure Developer Associate (AZ-204)**



 **Microsoft Certified: DevOps Engineer Expert (AZ-400)**

-  **AWS Certified Developer - Associate**
-  **Certified Kubernetes Administrator (CKA)**
-  **HashiCorp Certified: Terraform Associate**

Continuous Learning:




- Active contributor to open-source projects on GitHub (Python, Go, Kubernetes tooling) - Regular speaker and participant at Cambridge and London software engineering meetups - Following latest developments in AI-assisted development, platform engineering, and cloud-native patterns - Experimenting with GitHub Copilot, LLM integration patterns, and AI-native application architectures

SECURITY CLEARANCES


-  **UK SC (Security Check)** - Valid until 2028
 -  **NATO Clearance** - Valid until 2029
 - ✓ **Background Checks:** Watchdog (2024), Sterling (2019)
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AVAILABILITY & CONTACT

Immediate Availability for Senior Software Developer roles in Cambridge and remote positions

-  **Schedule a Discussion:** <https://calendly.com/rifaterdem/schedule>
 -  **Email:** contact@rifaterdemsahin.com
 -  **Phone:** +44 7848 024173
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SUPPORTING DOCUMENTS

-  **Technical Portfolio & Presentations:**
<https://rifaterdemsahin.com/wp-content/uploads/2025/02/rifaterdemsahinprofilepresentation.v2025.2.pdf>
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References and detailed project portfolios available upon request