

Dr Sam Walpole

Senior Software Engineer

Remote - United Kingdom

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Building secure, scalable systems with .NET and AWS, with experience in high-volume transaction processing and system integrations

Summary

Senior Software Engineer with 6+ years of experience building secure, high-volume systems in .NET/C# and AWS. Proven track record leading critical projects from architecture through delivery, including platform integrations, third-party system migrations, and security compliance initiatives. Strong expertise in serverless architecture, microservices, and cross-functional collaboration. Currently leading platform unification efforts at Blackbaud, with domain experience in fintech processing over £500 million annually. Combines strong analytical skills from a PhD background with a proactive, ownership-driven approach to software engineering.

Skills

Languages & Frameworks	C# / .NET, TypeScript, SQL, GraphQL
Cloud & Infrastructure	AWS (Lambda, DynamoDB, SQS/SNS, EKS, CloudFront, Step Functions), Azure, Terraform, Serverless Framework
Architecture & Systems	Microservices, Event-Driven Architecture, REST APIs, Message Queues, Kubernetes/EKS, Docker
Data & Storage	SQL Server, PostgreSQL, DynamoDB, Redis
Observability & DevOps	Grafana, Logz.io, CircleCI, Infrastructure as Code
Development Practices	TDD, CI/CD, Agile/Scrum, On-Call/Incident Response, Technical Documentation, Mentoring
AI-Assisted Development	Claude Code, GitHub Copilot, MCP Servers

Experience

JustGiving (Blackbaud)

Remote - UK

Senior Software Engineer (2024 - Present) · Software Engineer (2022 - 2024)

- Leading cross-platform integration project: designing architecture, building new microservices, and coordinating with cross-functional teams across multiple business units
- Delivered multiple third-party provider integrations, enabling new platform capabilities
- Led security compliance initiatives and platform migrations, collaborating with SREs and security teams to meet critical deadlines
- Mentoring frontend engineers to become fullstack proficient in .NET development

Computer Service Centre

Norwich - UK

Cloud Developer (2020 - 2022) · Junior Cloud Developer (2019 - 2020)

- Developed cloud-based ASP.NET web applications including offshore energy people-tracking system and client marketplace
- Designed and implemented websites using Umbraco CMS with Azure hosting
- Planned work using Agile methods and implemented CI/CD with Azure DevOps
- Wrote automated unit, integration, and E2E tests using xUnit/NUnit and Selenium frameworks
- Developed plugins for Microsoft Dynamics CRM and maintained internal .NET applications

Education

University of East Anglia

Norwich - UK

PhD Structural Biology (2015 - 2019) · MChem Biological and Medicinal Chemistry (2011 - 2015)

- PhD: Awarded competitive BBSRC Doctoral Training Partnership scholarship; winning team in Young Entrepreneurs Scheme business competition
- MChem: Winner of the Katritzky Prize for Outstanding Performance and top of cohort for 4 consecutive years

Certifications

- 2025 **Claude Code in Action**, Anthropic Academy
- 2024 **AWS Certified Developer - Associate (84%)**, Amazon Web Services
- 2023 **AWS Certified Cloud Practitioner (88%)**, Amazon Web Services
- 2020 **MCSA: Web Applications**, Microsoft