

Simon Lamb

Principal AI/Software Engineer | GenAI/RAG, LLMOps, SRE

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PROFESSIONAL SUMMARY

I build production GenAI platforms on Microsoft Azure with DevOps leadership from the ground up. Recently focused on LLM platform engineering at Microsoft Azure Core, delivering AI systems with full LLMOps/MLOps rigor—CI/CD, evaluation pipelines, guardrails, observability, and cost/latency governance.

Engineered platforms applying Azure OpenAI + agentic retrieval to analyze Microsoft product codebases, automatically surfacing security, performance, and best-practice risks. Designed token-aware batching, caching, and aggregation strategies for processing thousands of lines of code cost-effectively.

CORE TECHNICAL STACK

AI/ML & GenAI Azure OpenAI, RAG (vector/hybrid), Semantic Kernel, LangChain, Azure AI Search, Token Optimization, Structured Outputs, Liquid Templates, MLflow, Databricks	Cloud & Infrastructure Azure (AKS, App Services, Front Door), Bicep/Terraform, GitOps (Flux/Argo), Docker/Kubernetes, Azure Policy, Managed Identity
DevOps & SRE CI/CD, GitHub Actions, Azure DevOps, SLO/SLI Monitoring, Error Budgets, Blue/Green Deployments, Observability (Grafana/Prometheus)	Languages & Frameworks Python, C#/.NET, TypeScript, React, SQL, PowerShell, Bash

PROFESSIONAL EXPERIENCE

Senior Software Engineer

Jul 2024 - Jul 2025

Microsoft Engineering - Azure Core

- Engineered LLM-driven governance platform using Semantic Kernel in C# analyzing internal Microsoft product codebases to surface security, performance, and best-practice risks before rollout, reducing deployment incidents
- Developed Azure DevOps extensions using React with TypeScript and the Azure DevOps Extension SDK to display governance outputs at massive scale across Microsoft's global build platform
- Innovated structured outputs layer with OpenAI Structured Outputs and Liquid templates, guaranteeing hallucination-free reports with 100% UX alignment
- Optimized large code context analysis (millions of lines) through token-aware batching, caching, and intelligent consolidation strategies
- Embedded comprehensive LLMOps pipeline with Azure Evaluation SDK enabling safe prompt iteration across multiple developers

Azure OpenAI

RAG/Vector Search

LLMOps

Structured Outputs

Python

C#

React

Azure DevOps Extensions

Senior Software Engineer

Apr 2024 - Jul 2024

Microsoft Engineering - Microsoft Cloud

- Built comprehensive framework optimizing onboarding of Industry Solutions within the Microsoft Fabric portal, providing packaged resources for retail, manufacturing, and healthcare verticals
- Developed solution accelerators using React with TypeScript leveraging ASP.NET Core APIs, integrating directly with Microsoft Fabric backend
- Engineered following Microsoft's strict Engineering System guidelines for scale, performance, security, and best practices

React TypeScript .NET Microsoft Fabric Azure DevOps

Cloud Solution Architect

Jul 2019 - Apr 2024

Microsoft - Global Partner Solutions

- Partnered with enterprises and ISVs to modernize workloads on Azure, accelerating GenAI adoption through workshops and proof-of-concepts, reducing prototype-to-production from months to weeks
- Delivered hands-on enablement for Databricks, MLflow, and Semantic Kernel implementations
- Strengthened partner delivery quality by embedding DevOps/DevSecOps practices at scale
- Influenced engineering teams through architectural workshops and design reviews

Azure OpenAI Databricks MLflow AKS Bicep/Terraform GitOps

DevOps OpenHack Tech Lead (Part-time)

Jun 2019 - Sep 2021

Microsoft

Led global DevOps OpenHacks in Melbourne, Sydney (Satya Nadella's ANZ visit), Canberra, Las Vegas (Inspire/Ready), and Seattle (TechReady). Directed coaching teams of 10+ engineers, mentoring hundreds of attendees from partners including ANZ, Deloitte, EY, KPMG, Accenture, PwC. Achieved ~95% satisfaction scores.

Technical Evangelist

Feb 2017 - Jul 2019

Microsoft - Developer Experience

Evangelized Microsoft development technologies through technical content, conference presentations, and architectural guidance. Recognized as primary DevOps SME, supporting enterprise customers in transformation journeys.

Tech Architect Lead / DevOps Lead

Jun 2004 - Feb 2017

Fred IT Group

- Led team of 6 engineers delivering pharmacy dispensing platform for major pharmacy groups
- Built on .NET, SQL Server, Dynamics AX optimized for clinical-grade reliability
- Implemented SRE practices (SLO/SLI monitoring, error budgets) and blue/green deployments
- Modernized DevOps with Azure DevOps + IaC, implementing PBS compliance pipelines

C#/.NET SQL Server Dynamics AX Azure DevOps IaC SRE

KEY PROJECTS

LLM-Driven Governance Platform - Microsoft Engineering

Architected production-scale AI governance platform using Semantic Kernel in C# with Azure OpenAI models and Azure AI Search (vector + hybrid) for analyzing internal Microsoft product codebases. Implemented sub query decomposition, agentic parallel execution, and structured output responses with citations. Designed token-aware batching enabling processing of millions of lines of code in smart batches. Engineered output system using OpenAI Structured Outputs and Liquid templates to eliminate hallucination in governance reports.

Azure DevOps Governance Extensions - Microsoft Engineering

Built enterprise-scale Azure DevOps extensions using React with TypeScript, leveraging the Azure DevOps Extension SDK for Build, PR, and Dashboard integration. Architected using Flux pattern with Redux Toolkit for predictable state management. Built real-time data synchronization using SignalR WebSocket connections. Optimized bundle size through code-splitting, tree-shaking, and dynamic imports. Built via Azure DevOps Pipelines executing extensive testing and code coverage targets.

Microsoft Fabric Industry Solutions - Microsoft Engineering

Architected full-stack solution accelerator framework for Industry Solutions using React + TypeScript frontend with ASP.NET Core backend microservices. Implemented domain-driven design patterns with CQRS and Event Sourcing for data pipeline orchestration across retail, manufacturing, and healthcare verticals. Built React component library using Compound Component pattern. Integrated with Microsoft Fabric REST APIs implementing circuit breaker pattern. Built observability stack with Application Insights and distributed tracing.

DevOps OpenHack Program Leadership

Led Microsoft's global DevOps OpenHack program across 5+ cities including events during Satya Nadella's ANZ visit. Mentored 100s of engineers from major partners, achieving 95%+ satisfaction scores.

Regulated Healthcare Platform - Fred IT Group

Led team of 6 engineers to architect pharmacy dispensing platform with clinical-grade reliability. Implemented SRE practices (SLO/SLI monitoring, error budgets), blue/green deployments, and PBS compliance pipelines serving major pharmacy chains.

EDUCATION

Wesley College, Melbourne

1992 - 1994