

Jason Doyle

Senior Software & Reliability Engineer | Distributed Systems, Data Platforms & Applied AI

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Hands-on engineer with more than 10 years across Microsoft software, cloud, data and productivity platforms. Broad experience spans distributed systems, reliability engineering, large-scale data and telemetry platforms, automation, incident response and applied AI, with deep expertise in making complex production systems observable and dependable. Led reliability for Azure data services supporting millions of users and architected cloud-scale analytics foundations using Azure Data Explorer, Azure Synapse and Microsoft Fabric. Works end to end from architecture and implementation through production diagnosis, tooling and iterative improvement, independently and with cross-disciplinary teams.

SELECTED IMPACT

- Contributed to an approximately 40% reduction in incident time-to-resolution across a multi-service Azure portfolio by introducing structured incident command, telemetry-led diagnosis and standardised follow-through.
- Architected shared telemetry and analytics foundations using Azure Data Explorer, Azure Synapse and Microsoft Fabric for large-scale reliability analysis, operational decision-making and AI-assisted insight.
- Built and maintained large-scale software, data-processing, automation and telemetry systems across multiple Microsoft engineering organizations, from Office engineering through Azure production services.
- Designed and deployed BarnPage, a full-stack TypeScript product for riding barns. It uses PostgreSQL and Azure, with trainer-reviewed AI features.

CORE EXPERTISE

Software & distributed systems: C#/ .NET, TypeScript, SQL/T-SQL, APIs, distributed systems, cloud-native architecture, CI/CD, automation frameworks and production engineering.

Reliability & production operations: SRE, high-availability systems, incident command, deep production troubleshooting, SLI/SLO design, operational readiness, post-incident review and service ownership.

Data, telemetry & observability: Azure Data Explorer/Kusto, SQL Server, PostgreSQL, Microsoft Fabric, Azure Synapse, ETL/ELT, telemetry warehouses, semantic models and operational analytics.

Applied AI & agent systems: Agentic application architecture, MCP, durable workflows, retrieval and context, AI-assisted operational analytics, provenance, lineage and controlled automation.

SELECTED TECHNOLOGIES C#/ .NET | TypeScript | SQL/T-SQL | PostgreSQL | Azure Data Explorer/Kusto | Microsoft Fabric | Azure Synapse | MCP | APIs | CI/CD

PROFESSIONAL EXPERIENCE

Senior Customer Experience Engineer | Technical Lead, Reliability and Observability

Mar 2025 - Present

Microsoft | Azure Engineering Operations | Redmond, WA

- Lead cross-product reliability and observability engineering across Azure services, connecting internal service signals with operational decisions, customer-facing reliability and engineering action.
- Architected cloud-scale telemetry warehouse solutions using Azure Synapse, Microsoft Fabric and Azure Data Explorer for ingestion, analysis, service-health reporting and operational decision intelligence.
- Defined a cross-product SLI/SLO exposure strategy that translates internal telemetry into actionable reliability signals across engineering and customer-facing systems.
- Lead adoption of AI-assisted operational analytics for reliability insight, incident detection and proactive service-health analysis.
- Partner with engineering teams and Fortune 500 customers during complex production incidents, driving diagnosis, mitigation, architecture improvements and durable follow-through.

PROFESSIONAL EXPERIENCE, CONTINUED

Senior Site Reliability Engineer | Azure Data

Sep 2023 - Mar 2025

Microsoft | Redmond, WA

- Led reliability strategy for Azure data services supporting millions of users in production.
- Directed high-severity incident response and deep production troubleshooting, coordinating telemetry-led diagnosis, mitigation, communication and systemic remediation.
- Introduced structured incident command, telemetry-led diagnosis and standardised post-incident practices across the service portfolio.
- Drove adoption of SRE practices, operational readiness reviews, service ownership and blameless post-incident review across engineering teams.
- Mentored engineers and helped establish clearer ownership for reliability, performance and operational improvement.

Senior Site Reliability Engineer | Localization as a Service

Sep 2019 - Sep 2023

Microsoft | Redmond, WA

- Owned reliability, performance and operational efficiency for high-availability platforms supporting global Microsoft product workflows.
- Modernized infrastructure, monitoring and operational tooling across several Azure services, improving visibility into production behavior and failure modes.
- Delivered cost and efficiency improvements while preserving service reliability and performance expectations.
- Built automation that improved deployment consistency, operational readiness and incident response.

Software Engineer | Microsoft Ireland

May 2014 - Sep 2019

Contract and internship roles | Dublin, Ireland

Progressed through Data and Telemetry, Unassisted Quality, Natural Language Experience, and Office International Publishing Group teams.

- Built and maintained large-scale data-processing, telemetry, localization and validation systems for Microsoft Office engineering.
- Developed automation frameworks, workflow tooling and Azure-based internal services.
- Improved the performance and reliability of distributed validation and publishing workflows.
- Collaborated across engineering teams in Europe and North America on cloud and productivity-platform solutions.

INDEPENDENT ENGINEERING & TECHNICAL WRITING

BarnPage - Deployed product for riding barns

barnpage.com

- Built a full-stack TypeScript and Next.js product using PostgreSQL and Azure. Designed barn-scoped roles and private lesson media, with AI-assisted feedback held for trainer review.

Agentic Data Kernel - Open-source agent infrastructure

github.com/Jason-Doyle/agentic-data-kernel

- Designed and implemented an agent-first persistence layer for durable knowledge, workflows, causal lineage and controlled effects, with SQLite/PostgreSQL storage, TypeScript APIs, MCP/HTTP interfaces, reconciliation, security boundaries and cloud deployment templates.

Selected writing:

- When Memory Becomes Production State
- Observability Is a Decision System
- When the Endpoint Is Up but the Product Is Failing

Full portfolio: jasondoyle.ie/whitepapers

EDUCATION

City & Guilds Diploma in Systems and Principles, NFQ Level 6

Griffith College, Dublin | 2013 - 2014

FETAC Level 5 Certificate in Information Technology

Ballyfermot College of Further Education, Dublin | 2009 - 2010