

Andy Barber

Platform Engineer | Applied AI Engineer | Azure Cloud & AI Solutions

Rotherham, UK | Hybrid / Remote | +44 7812 137 425 | andy@andy-barber.co.uk | linkedin.com/in/andy-barber

Professional Profile

Platform and reliability engineer with 20+ years in infrastructure and more than a decade on Microsoft Azure, now building applied AI on the same platform. Designs, automates and operates production environments across AKS, Terraform, Azure DevOps and cloud-native PaaS, and has shipped production AI workloads into customer environments on Azure AI Services alongside that platform work.

At Extrinsica Global designed and delivered a production computer-vision and OCR pipeline for document processing and PII classification, and built a retrieval-augmented documentation assistant as a Microsoft Word add-in. Holds the Microsoft Azure AI Engineer Associate certification alongside Azure Solutions Architect Expert, and stays current through hands-on work with RAG, vector search, prompt engineering, agent orchestration and local model deployment: enough depth to reason about inference cost, latency and quality trade-offs rather than treat a model as a black box.

Core Expertise

Applied AI & LLM	Azure AI Services (computer vision, OCR, document intelligence, PII detection), RAG architectures, embedding & vector search (Azure AI Search), prompt engineering, agentic / multi-agent orchestration, Ollama, llama.cpp, quantisation & inference tuning, Whisper, n8n
Data & ML Lifecycle	Master data management, Azure Data Factory, data cleansing & enrichment pipelines, OCR and document classification, Elasticsearch, Neo4j, SQL, Purview governance
Azure & Cloud Platform	AKS, Functions, App Gateway, APIM, Storage, Azure SQL, Entra ID, Key Vault, private endpoints; AWS exposure, Kubernetes, Docker, Helm, KEDA, Proxmox
IaC & Delivery	Terraform, Bicep/ARM, Packer, Azure DevOps Pipelines, GitHub Actions, GitOps, DevSecOps scanning, blue/green and canary release
Reliability & Observability	Datadog, Azure Monitor, Application Insights, Log Analytics / KQL, Grafana, Prometheus, synthetic monitoring, SLIs / SLOs, incident response, blameless postmortems
Development & Integration	REST and GraphQL APIs, Python, Go, C#, PowerShell, Bash, JavaScript / Vue.js, Logic Apps, Power Automate, webhook and event-driven integration

AI & Machine Learning Delivery

Computer Vision / OCR Document Processing & PII Classification (Extrinsica Global)

- Designed and implemented a production Azure pipeline to bring five years of accumulated customer uploads, several hundred thousand blob files from a public-facing property-purchase service, under regulatory compliance and security review. Used Azure AI Services computer vision and OCR to extract text and metadata from unstructured documents, then scan and categorise them for personally identifiable information.
- Orchestrated through Azure Data Factory with Azure Storage and an optional Function App for PDF interrogation; integrated with Microsoft Purview for governance and metadata cataloguing; secured throughout with system-managed identities and least-privilege RBAC, the controls that make AI processing of sensitive documents viable in an enterprise.

Retrieval-Augmented Documentation Assistant, Microsoft Word Add-In (Extrinsica Global)

- Built a proof-of-concept Word add-in that let users query internal documentation from inside the document they were writing, retrieving relevant source material and generating grounded, cited answers in place. Retrieval-augmented generation applied to a real authoring workflow rather than a chat window.
- Covered the full RAG surface: document ingestion and chunking, embedding and retrieval, prompt construction, and integration into an existing end-user application through the Office add-in model.

Data Foundations for AI (CluedIn)

- Built the Azure Data Factory and Logic Apps pipelines that consolidated, cleansed and enriched enterprise customer data: the preparation layer that determines whether downstream AI and retrieval systems produce usable results.

Continuous Self-Directed Practice

- Uses AI-driven development daily through a multi-agent coding environment on opencode, using an orchestrator / executor / scout / wiki agent pattern that combines cloud Claude models with local Ollama models, with scoped permissions and repo-level agent instruction files.
- Runs a self-hosted GenAI stack (Ollama, Open WebUI, Qdrant vector database, n8n workflow automation and Whisper) as a working RAG and agent-integration test bed, and has tuned local inference on consumer GPU and Apple silicon (context-window sizing, KV-cache quantisation, MoE offloading, speculative decoding) for practical grounding in LLM cost, latency and quality trade-offs.

Professional Experience

Sorted Group | Senior Site Reliability Engineer Dec 2025 – Aug 2026 (role ended, redundancy)

Owned design, operation and continuous improvement of Azure platforms across AKS, Azure SQL, Functions and Logic Apps, combining SRE practice (SLOs, observability, incident response) with platform engineering so product teams could ship faster and more safely.

- Built and rolled out an internal self-service platform replacing a high-risk manual SQL change process: engineers schedule and monitor database changes from Slack, with PowerShell Durable Functions orchestration, durable timers, automated failure recovery and automatic firewall-rule cleanup. Removed short-notice on-call callouts for database changes entirely and closed the service-availability exposure that risked contractual penalties either side of a scheduled change.
- Authored reusable Terraform solution modules adopted by internal development teams as the standard Azure deployment pattern across 12 development, test, non-production and production subscriptions; drove adoption deliberately through built-in validation, naming standards, generated documentation and worked CI/CD examples.

- Drove proactive failure detection with Datadog, synthetic monitoring and Azure Monitor; embedded DevSecOps scanning (Trivy, CycloneDX, Dependency-Track) into CI/CD supporting blue/green and canary release patterns.
- Active on the on-call rota, led blameless postmortems, coached engineers, and built the FinOps tagging, budget and cost-reporting practice management teams used to hold a 30% reduction in Azure spend.

Extrinsica Global (iOmart / Atech Cloud) | Cloud Solution Engineer Jun 2024 – Dec 2025

Solution engineering across the full delivery lifecycle: discovery, design, build and review, turning high-level designs into implemented, automated Azure environments and delivering the AI workstreams described above.

- Translated HLDs into detailed LLDs, making the build-versus-configure calls and delivering repeatable Azure IaaS and PaaS deployments via Terraform, Azure DevOps and GitHub Actions.
- Architected and built a self-service application that cut customer Windows image builds from weeks to hours, enabling rapid iteration on commonly used applications. Modular Vue.js front end, C# backend, Packer, Docker and Azure Compute Gallery, provisioning software from Chocolatey, WinGet and Azure Storage with cross-subscription distribution.
- Built an approval-driven Teams governance solution using Azure Automation, Power Automate, Microsoft Forms and SharePoint, with PowerShell dynamically enforcing policy in the Teams Admin Centre and scheduled compliance reviews.

CluedIn | Implementation / Infrastructure & SRE Engineer Aug 2022 – Jun 2024

Deployed the CluedIn master data management platform into enterprise customer environments including Bayer, Bucherer, Guardrisk, Microsoft and Svevia on Azure Kubernetes Service, processing tens of thousands of entities drawn from tens of source systems, then evolved into owning platform reliability and performance for those deployments.

- Led the integration of KEDA event-driven autoscaling, authoring custom Helm charts to replace statically assigned node pools with demand-driven scaling: cut thousands per month from Kubernetes compute spend with no loss of operational performance.
- Identified that deployment collateral was ad-hoc and inconsistent, and established a standardised design and documentation process: structured customer design meetings plus reusable Helm charts and ARM/Bicep artefacts, improving installation consistency and post-deployment supportability.
- Built a PowerShell configuration-migration toolset using GraphQL and REST APIs to export, store and replay system configuration between customer environments.

Microsoft | Support Engineer, Azure Monitor (EMEA) Oct 2021 – Aug 2022

- Supported enterprise customers implementing and operating Azure Monitor, Application Insights and Log Analytics: assessing requirements, advising on implementation approach, and providing ongoing technical guidance to drive full adoption of the platform.
- Analysed application telemetry and logs to isolate performance bottlenecks and improve availability and stability, including a sustained engagement with a large parking e-commerce platform.

WANDisco (Cirata) | Customer Success Engineer Mar 2020 – Oct 2021

- Owned technical onboarding and deployment of LiveData replication at scale across Hadoop, Azure Data Lake and AWS, contributing to a published migration of 500TB across 8.6 million files from a live 800-node cluster to AWS S3 with zero business disruption.
- Built Logstash ingest pipelines and Kibana dashboards that correlated tens of thousands of log lines across distributed systems, turning a manual review process into a repeatable diagnostic capability.

Earlier Experience

TransUnion | Senior Infrastructure Engineer Jan 2020 – Mar 2020

Automated Azure app-registration credential-expiry reporting with PowerShell and Azure Automation; integrated privileged-account provisioning via CyberArk REST APIs; contributed to P2V and SQL failover-cluster migration planning.

BT | Senior Monitoring / Infrastructure Engineer Mar 2019 – Jan 2020

Resolved complex escalated incidents with root-cause analysis; product-owned an internal Elasticsearch analytics service, translating user requirements into development scope; designed multi-level training modules and led the team's Git/GitLab adoption.

SEAMS Ltd (Arcadis) | Deployment & Operations Lead Mar 2016 – Mar 2019

Managed the deployment team responsible for every internal and customer rollout of a multi-tier analytics platform across Azure, AWS, hybrid and air-gapped environments, covering solution design, CI/CD and scripted automation, and controlling deployment complexity across highly configurable installations.

Civica Education | Technical Operations Consultant Jan 2014 – Mar 2016

Proactive monitoring, infrastructure consultancy and root-cause analysis for 160+ organisations; designed and managed distributed SCOM / System Center solutions, including a blue-light services implementation for an estate of up to 20,000 users.

School Partnership Trust Academies | ICT Network Manager Nov 2012 – Jan 2014

Infrastructure strategy, service delivery and a 16-person support function across 14 sites; delivered a new-build technology migration, a 190-device tablet deployment and System Center 2012 projects.

Certifications & Education

- Microsoft Certified: Azure Solutions Architect Expert (AZ-305) · Azure Administrator Associate (AZ-104) · Azure AI Engineer Associate (AI-102)
- Microsoft Certified Fundamentals: Azure AI (AI-900) · Azure Data (DP-900) · Azure (AZ-900)
- HashiCorp Certified: Terraform Associate (004)
- GitHub Certified: Foundations · Actions · Administration

- Rother Valley College: Outdoor Education Supervision & Leadership, nationally recognised outdoor-activity supervision qualifications. Full UK driving licence.