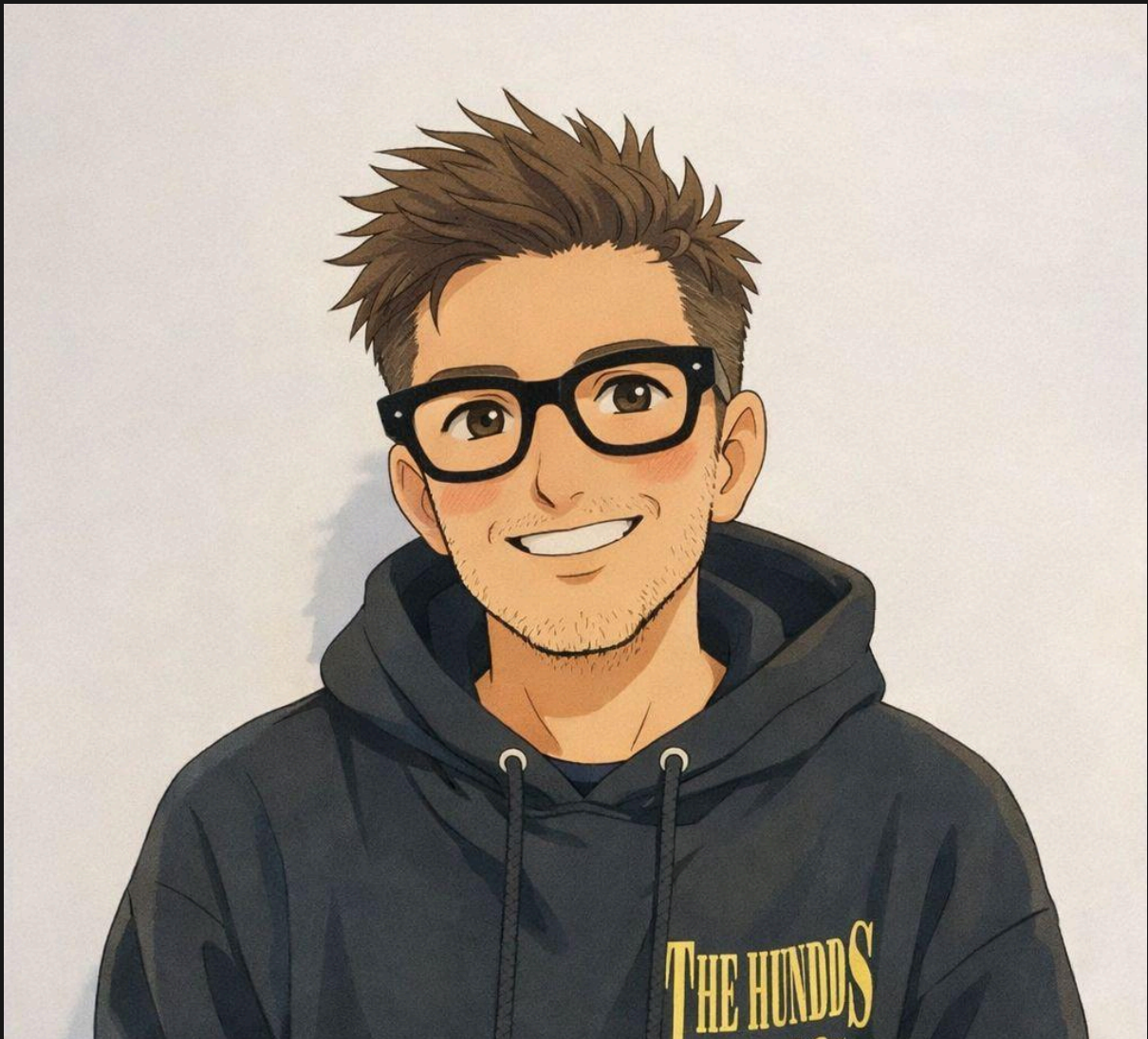




Karl Bateman

Principal Engineering Lead

jobs@karlbateman.co.uk
Douglas, Isle of Man
github.com/karlbateman

~1B MAU

Audience reach across the globe

~120 Engineers

Led across 3 global teams

Profile

Software engineer with twenty years of experience designing and operating large-scale distributed systems, now working at the intersection of platform engineering and applied AI. I lead teams building the infrastructure that production machine-learning systems depend on; serving, retrieval, evaluation and the reliability work that makes them trustworthy.

Organised and methodical, with a bias toward systems that are scalable, observable and well documented. Relentlessly curious about emerging technology and how it can be pointed at real business problems.

A husband and father of two, with strong family values and the conviction that good engineering and a good life are built the same way.

Experience

Beyond

Principal Engineering Lead

June 2024 - Present

Assigned to the company's most prestigious accounts, leading our engineering teams to deliver our clients most ambitious systems such as the design, build and migration to a next-generation content management system, responsible for delivering over-the-air content updates to 500,000 devices around the world, providing in-store promotional materials for product launches.

Principal Engineer

Feb 2022 - June 2024

Supported the company's strategic move into artificial intelligence and joined the external workforce of a leading search and AI company, contributing to several of its most complex programmes such as an internal learning and development platform, enabling intelligent career progression and informed pivoting through a conversational AI experience. Additionally setting the technical approach for early AI engagements and the internal capability behind them such as the exploration of agentic commerce within a leading online payments provider.

Software Engineering Specialist I - II

Nov 2019 - Feb 2022

Designed and developed solutions for the company's most challenging engagements such as global environmental reporting platform for leading fashion brands, while establishing engineering best-practices across Beyond, the documentation to support them, and mentoring culture across our engineering disciplines.

Senior Backend Engineer

Dec 2018 - Nov 2019

Built and maintained large-scale backend systems for global audiences and prestigious clients such as the migration of a digital rights management system from C++ to NodeJS and exceeding performance requirements.

KRB

Freelance, Contractor

2006 - Present

Ongoing independent engagements across business, government and scientific institutions, providing technical guidance, architecture review and proof-of-concept work against unusually demanding requirements.

Oxhey Hall

Fullstack Engineer

2015 - 2017

Built the next generation core product and tooling for an asset-lifecycle consultancy, passing an external security audit and used across critical national infrastructure and military locations.

Skills & Technologies

Languages

Go, Python, Typescript, SQL; working Rust and C++

Distributed Systems

Event streaming, caching, sharding, large-scale API design

Infrastructure

Kubernetes, Terraform, Google Cloud Platform, AWS, Azure

Observability

OpenTelemetry, Prometheus, Grafana

Machine Learning

PyTorch, TensorFlow

Inference & serving

vLLM, Triton, ONNX

LLM Systems

RAG pipelines, embeddings, vector databases, agents and tool-use, evaluation harness

Practice

System design, technical leadership, mentoring

Open Source

praetorian	A simple key-management service.
centurion	A lightweight encryption service.
backpack	Content-addressable blob store.
htag	Content tagging without LLMs exploration.

To see more examples of work I do in my spare time, please see my Github profile github.com/karlbateman. Happy to talk through any of it in detail.

Education

Foundation Degree, Computer Science	2010 - 2011
Birkbeck College, University of London	
National Diploma, Information Technology	2004 - 2005
West Herts College	

References

Available upon request.