Colin Clark | head of software engineering
VP Engineering | AI & cloud strategy

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Profile

A strategic and innovative **Head of Software Engineering** with 18 years commercial experience driving engineering excellence and delivering impactful software solutions. Proven expertise in leading scalable, high-performance system architectures and transitioning products into enterprise-grade B2C applications and B2B SaaS platforms. Skilled at managing complex technical initiatives, including performance, security, and DevOps optimisations, while ensuring on-time, on-budget delivery. A forward-thinking leader and mentor with a passion for integrating AI-driven methodologies into metrics-based continuous improvement. Adept at aligning cutting-edge technical strategies with business objectives, cultivating cross-functional collaboration, and building stakeholder trust to drive innovation and long-term value.

Skills & Achievements

- **Leadership & Mentorship:** Managed 6 teams of 35 full stack engineering direct reports. Empowered and scaled cross-functional and self-organising teams, fostering stakeholder engagement and streamlining delivery efficiencies.
- **Technical:** 55% reduction in monthly deployment costs, 80% faster Next.JS application page loads and 40% improvement of Python Lambda API speeds. Continuous delivery champion. Enforced best-in-class standards for cloud-native testing, security, performance, and monitoring, resulting in distributed reliable and stable products that delight customers and business owners.
- **System Design:** Designed service-oriented systems connected by event-driven architecture.
- **Operational Excellence:** Advocated for accountability, ownership, and continuous improvement. Leveraged metrics to identify areas for process optimisation, driving consistent performance enhancements and team empowerment.

Technology Stack

- **Languages & Frameworks**: Expert in TypeScript, JavaScript, Node, Python, FastAPI, GraphQL, REST, SQL/NoSQL, React, Next.js, and much more. AWS technologies, e.g. Lambda, DynamoDB, Aurora. Authentication via OAuth, SSO, JWT and AWS Cognito and IAM role-based permissions. AWS Certified.
- **Deployment & Delivery**: Git, GitLab, AWS. Jenkins, and CircleCI for reliable, fast deployments; integrated AI-driven monitoring for predictive failure analysis. Robust monitoring with CloudWatch, AppCheck, and Sentry, ensuring high availability. Docker/Kubernetes.
- **Microservices & Frontends**: Implemented microservices and micro-frontends with single-spa and webpack module federation for independent scalability. Building RESTful APIs, low code APIs via Lambda, and GraphQL connections to NoSQL databases.
- **AI**: LLMs. Generative AI, AI governance, OpenAI API, and promoter of AI-driven engineering. AI-powered anomalous traffic detection.

Career History

Stratos Technologies, Head of Software Engineering | April 2024 – Present
Architected and scaled a multi-tenant B2B SaaS platform in Next.js, empowering multinational construction firms (€10B+ revenue) with AI-driven market insights.
- Led the transformation of Stratos from a single-customer service into a scalable B2B SaaS platform with 10 global customers within 6 months.
- Designed Generative AI-powered features that surface sales opportunities to customers via a modern, crisply branded UI.

- Established a high-performance engineering culture, focusing on AI-enhanced DevOps, security, and system scalability to ensure a seamless, automated deployment process.
- Architected an enterprise ready FastAPI API to expose data insights from a data lake, wrapping and training internal LLMs that supplement tables, charts, and other data-rich features.

Essensys, Staff Software Engineer | Jan 2023 – April 2024
Managed six engineering teams, with 35+ indirect reports across mobile, desktop, and IoT. Chief engineer and architect of a service-oriented application managing flexible working spaces for global B2B clients. React, Serverless, Lambda, Node, TypeScript, AWS EventBridge. Implemented DORA metrics and other KPIs to drive engineering efficiency and business satisfaction.
- Promoted coding excellence by restructuring microservices: removing unwanted dependencies, enforcing clean code, and defining engineering standards for testing, performance, and operational excellence.
- Simplified code to enhance user experience, improving performance by reducing duplicated network requests and saving £15K+ per month.
- DevOps: Reduced the cost of running deployment pipelines by 55%+. Enabled Continuous Delivery whilst reducing change failure rate through faster feedback and better AI-powered observability.

CoStar Group, Lead Software Engineer | Oct 2019 – Dec 2023
Led the rollout of an SEO-optimised, performance-focused strategy across multiple B2C commercial property listing sites, achieving top organic Google rankings and driving core web vitals improvements, while fostering a culture of clean code and innovation through workshops, technical forums, and mentoring a team of 12 engineers. Developed KPIs and automated deployment health checks to ensure top-level performance metrics were maintained, focusing on core web vitals such as page speed, TTFP, LCP, FID, CLS, and accessibility.

The Times & The Sunday Times, Staff React Engineer | Jan 2018 – Jun 2019
Architected a TypeScript-based GraphQL API with optimised DynamoDB queries for The Times and The Sunday Times, driving backend performance and scalability, while setting success metrics for the engineering team and delivering a unified hybrid React application across web and mobile. Built components in React Native Web to deliver a scalable, accessible, and tightly branded set of components for the desktop, iPhone and android applications.

Boston Consulting Group, Lead JavaScript Engineer | May 2016 – Dec 2017
First developer on a greenfield B2C start-up, delivering an MVP React web and React Native mobile within six weeks, scaling the application to 100K+ users within the first year, and growing and mentoring a high-performing engineering team to evolve both product and process.

Deutsche Bank, BskyB, Camelot, Cambridge & London | Sept 2006 – April 2016

Education

Birkbeck University, London, BA English Literature & Creative Writing | 2019 – 2022
First Class with Distinction.

For Fun

Swam in the Amazon, walked on a glacier, drove a 4x4 at 5000 meters, climbed a smoking volcano.
Hobbies: Running, travel, literature.