CV

TL;DR

I'm Luke - a software engineer and engineering manager determined to solve every problem collaboratively and elegantly. I firmly believe in the power of simplicity and divergence.

I build modern, scalable systems with event-driven APIs and performant UIs.

My primary stack consists of: TypeScript, Node.js, GraphQL and React/Next.js. My cloud of choice is AWS.

You can checkout my portfolio at **level-out.com** and **github.com/lukehedger**

Experience

Over the past 12 years, I have worked at all layers of the software engineering stack; on serverless payment platforms, state-of-the-art React apps, blockchain networks, viral marketing websites, open source tools and a pineapple delivery system. I've worked for early-stage startups, international corporations, prominent charities and infamous advertising agencies. I've also written articles and given talks about some of the things I've discovered along the way.

Timeline

Sep 2019 - Current | **Lead Software Engineer (Payments)** | Cancer Research UK

Lead development of a greenfield payments platform to process Cancer Research UK's online donations, including the Stand Up To Cancer TV campaigns on Channel 4. Provided technical leadership on architecture, implementation and operation in response to critical demand from the charity to migrate processing of 1000s of daily transactions from an unreliable and expensive legacy system to a resilient, scalable and cost-effective platform.

In the first few months, the plaform realised a 94% reduction in operational costs, scaling without incident to process over £1m of donations with a 30% increase in conversion.

The payments platform is cloud native on AWS and fully serverless, with an event-driven architecture that leverages Lambda (Node.js/TypeScript), Step Functions, Amplify, AppSync, API Gateway, EventBridge, SQS, Kinesis Firehose, Glue and Athena.

A rapid yet sustainable agile workflow was established to continually deliver new features and optimisations, combining the modern practices of infrastructure-as-code, continuous delivery, GitOps and fully automated, self-mutating deployment pipelines with tools such as the AWS CDK, AWS CodePipeline and GitHub Actions.

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Mar 2017 - Aug 2019 | **Software Engineer, Head of Platform** | JAAK

Headed up development of the JAAK platform, providing content infrastructure to innovative music platforms and independent artists, with features including user authentication, content delivery and payments. Worked across the entire stack to build scalable APIs in Go and performant React applications that aggregated rights data and assets for millions of musical works and recordings. Also lead research projects around programmatic licensing on the Ethereum blockchain, modelling decentralised identity and reputation in an open network and developing a rules engine for verifiable claims using JSON Schema and Lua.

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Apr 2016 - Mar 2017 | **Software Engineer** | Unlease

Lead product development of web application for UK-wide peer-to-peer rental community. Consistently shipped regular feature updates to 1000s of users, such as KYC, live text and video chat and intuitive date-picker. I also built a bunch of internal tools, including an account management dashboard, automated sitemap generator and pineapple delivery logistics system for a promotional campaign where Londoners could send each other pineapples.

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Oct 2014 - Apr 2016 | **Frontend Developer** | M&C Saatchi

Worked in agile, multi-discipline teams to deliver smart, modern websites and applications for clients including Converse, Land Rover, Ikea and Compare the Market.

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May 2013 - Oct 2014 | **Creative Developer** | Lean Mean Fighting Machine

Worked on briefs from ideation through to deployment, churning out finely crafted creations for clients like Unilever, Men's Health Forum, Forevermark and Google.

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Nov 2010 - May 2013 | **Lead Systems Engineer** | Enrich Reward Ltd.

Lead the conception, design and development of an enterprise-grade employee benefits SaaS platform that serviced 1000s of users.

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Nov 2007 - Nov 2010 | **Web Analyst** | Mercer Ltd.

Reporting and maintenance of global pensions admininstration system.