LUKE LESURF

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Open to remote and hybrid roles | UK based

PROFILE

Senior DevOps / Platform Engineer with 20+ years in software engineering, infrastructure, and security. A startup veteran at heart: I have been part of multiple companies that were built and successfully acquired (Invapay to Optal to Wex Inc., HMSL to Bottomline Technologies), with a track record of building robust platforms that scale from early stage to acquisition and beyond. Currently a platform SME at a 7,000-person organisation, specialising in migrating legacy applications onto a modern internal PaaS, and looking to return to the high-autonomy, hands-on environments where I do my best work.

Career spans payments, healthtech, and security consulting, from writing Java microservices to architecting cloud-native platforms on AWS and Kubernetes. Background in penetration testing and PCI-DSS compliance brings a genuine security-first mindset to every infrastructure decision. Senior individual contributor by choice: I lead through technical depth and mentoring, not management titles.

TECHNICAL SKILLS

Cloud	AWS (primary): ECS, EKS, EC2, Lambda, S3, CloudFront, RDS/Aurora, DynamoDB, SQS, SNS, EventBridge, VPC, Route53, IAM, CloudWatch, CloudTrail, WAF. Azure (AKS, fundamentals).
Containers	Docker, Kubernetes (EKS, AKS), Helm, ECS/Fargate, Docker Compose
IaC / Config	Terraform, Pulumi, Ansible, Packer (AMI builds), CloudFormation
CI/CD & GitOps	GitHub Actions, Jenkins, ArgoCD, Flux, reusable workflow templates
Languages	Java (20+ yrs), Bash/Shell (daily driver). Working familiarity: Go, Python, TypeScript, JavaScript, C#/.NET
Java Stack	Spring Boot / MVC, Maven, Gradle, JUnit, microservices, REST & SOAP APIs
Databases	PostgreSQL, MySQL/MariaDB, DynamoDB, MongoDB, Redis
Observability	ELK / OpenSearch, CloudWatch, Grafana
Networking	VPC architecture, subnets, NACLs, ALB/NLB, Route53, VPNs, firewalls, WAF
Security	Penetration testing, PCI-DSS compliance, HashiCorp Vault, IAM, KMS, Secrets Manager
Web / Proxy	Nginx, Apache, Caddy (reverse proxy, TLS termination, load balancing)
Messaging	SQS/SNS, EventBridge, RabbitMQ, Kafka, Redis Pub/Sub
Platforms	Platform engineering, internal developer platforms, golden path templates
Other	Git (advanced), GitHub org admin, Jira, Confluence, Agile/Scrum, AI/LLM tooling

CERTIFICATIONS

- AWS Certified Solutions Architect, Associate (2018, currently renewing)
- AWS Certified SysOps Administrator (2018, currently renewing)

CAREER HISTORY

DevOps Engineer *May 2023 to Present*

Wex Inc. — Remote (Fleet Management / Corporate Payments)

Working within a large-scale organisation whose core platform handles card authorisation traffic processing many thousands of transactions per minute across multi-region deployments.

Designed and implemented a multi-region active/passive failover system for the critical authorisation API. The architecture uses Route53 weighted DNS routing across regional ALBs with a custom latching mechanism: CloudWatch alarms detect traffic shifts to the secondary region and trigger an EventBridge/Lambda pipeline that swaps DNS weights, preventing premature failback to a potentially unstable primary. The design accounts for ALB health check timing, DNS TTL propagation delays, and split-brain edge cases across availability zones.

Part of a specialist enablement team acting as subject matter experts for the company's internal Platform-as-a-Service. The core of the role is being dropped into other teams with no prior knowledge of their applications, onboarding rapidly, and doing whatever is needed to migrate them onto the platform: containerising applications, rebuilding CI/CD pipelines in GitHub Actions, upgrading frameworks where necessary (e.g. legacy .NET to .NET Core), and writing Terraform for any infrastructure the platform does not yet cover. Applications span a range of languages and stacks (C#/.NET, Go, Java), so a large part of the work is getting productive in unfamiliar codebases quickly.

Key Tech: Kubernetes (EKS, AKS), ArgoCD, Helm, Terraform, GitHub Actions, Docker, Java 11+, Spring Boot, AWS (ECS, EFS, EC2, S3, SQS, SNS, RDS, VPC, Route53, ALB, Lambda, EventBridge, CloudWatch, CloudTrail), HashiCorp Vault.

DevOps Lead *May 2021 to May 2023*

Closed Loop Medicine — Remote (Healthtech)

Led all DevOps efforts across the organisation, including highly regulated clinical applications and studies. Implemented infrastructure-as-code standards, built autonomous CI/CD pipelines (continuous deployment, not just delivery) for backend microservices, serverless applications, mobile apps, and SPA web portals. Re-architected platforms toward serverless patterns and provided secure remote access solutions that dramatically simplified WFH for development and QA teams.

Championed DevOps culture across the wider development team, breaking down silos between development and infrastructure. Also functioned as a full-stack developer (backend microservices, core libraries, React SPAs) and managed corporate IT including office network infrastructure.

Key Tech: Java 11+, Spring Boot, PostgreSQL, React, JavaScript, Terraform, Pulumi, Jenkins, AWS (ECS, EFS, EC2, S3, SQS, SNS, RDS, VPC, Lambda, CloudWatch, CloudTrail), Nginx.

Infrastructure Manager *Sep 2019 to May 2021*

Optal / Wex Inc. — London (Payments)

Managed all cloud operations for the Invapay division, remote-hosted physical infrastructure, and corporate IT. Led post-acquisition integration projects and the migration of physical infrastructure to AWS, rebuilding legacy systems with Terraform and Ansible to align with existing cloud environments. Mentored Optal's Australian development team, including switching to night shifts for several months to work alongside them in their timezone, and upskilled them to operate as an independent DevOps function.

Key Tech: Terraform, Ansible, Packer, AWS (EC2, S3, RDS, VPC, Lambda, CloudWatch), ELK/OpenSearch, Linux (Ubuntu).

DevOps Manager *Sep 2014 to Sep 2019*

Invapay / Optal — London (Payments)

Returned to Invapay (a company I helped build from the ground up as one of two founding IT hires) to run the DevOps team across internal and external projects. As a regulated payments organisation, ensured PCI-DSS security and compliance controls were implemented throughout the software stack and infrastructure.

Led the full migration from physical data centres to a greenfield AWS platform, including the most sensitive payment card handling services, without sacrificing any security controls. Delivered a scalable, highly available, fault-tolerant system built entirely on infrastructure-as-code principles, while also delivering significant cost savings to the business.

Key Tech: Java 7+, Spring Boot, MySQL, Ubuntu, Chef, Ansible, Terraform, AWS (EC2, S3, SQS, SNS, OpsWorks, RDS, VPC, Lambda, CloudWatch, CloudTrail, Inspector).

Senior Developer *Jul 2012 to Feb 2013 & Feb 2014 to Sep 2014*

Purple Parking — London

Part of the development team redesigning and rewriting legacy systems, replacing third-party software with in-house Java applications. Restructured the physical hosting environment for high availability (MySQL Cluster, Apache/Tomcat). Introduced security best practices across the organisation.

Key Tech: Java 7+, Spring Boot, MySQL Cluster, Ubuntu, Apache/Tomcat.

Security Consultant *Feb 2013 to Feb 2014*

Blackfoot UK — London

IT security consultant conducting web application penetration testing, secure code reviews, infrastructure security assessments, and security training. Discovered and helped remediate serious vulnerabilities for large clients before they could be exploited in the wild. Member of the incident response team, providing first-call post-breach forensic and discovery support.

Key Tech: Penetration testing, secure code review, infrastructure assessments, incident response.

Development Team Lead *Dec 2009 to Jul 2012*

Invapay — Hertford

Hand-picked by the former founder of HMSL as one of two founding IT hires to build the entire technology platform for a new B2B payments startup from scratch. Lead developer on the core J2EE web-based payments platform. Technical lead in achieving PCI-DSS compliance. Built back-office automation and public web services (SOAP and REST). Designed and implemented PCI-compliant infrastructure from the ground up.

Key Tech: Java, J2EE, Spring, SOAP/REST, MySQL, PCI-DSS compliance.

Developer *2002 to 2009*

HMSL Group / Bottomline Technologies — Hertford

Software developer at HMSL Group (acquired by Bottomline Technologies in 2005). Built document digitisation and workflow management systems, converting paper invoices into structured data feeds using OCR and custom processing pipelines, long before this became commoditised. Developed foundational skills in Java, enterprise architecture, and data processing. When the HMSL founder later started Invapay, he hand-picked me as one of the first hires, the start of a professional relationship that would span the next two decades.

Key Tech: Java, J2EE, document digitisation, OCR, workflow management systems.

EDUCATION

AVCE, Advanced IT *2000 to 2002*

Hertford Regional College

ABOUT ME

Almost everything I know is self-taught. I love pulling things apart to understand how they work, and I am endlessly curious about technology in all its forms. Outside of work I run a NixOS home lab (ZFS, Docker, Forgejo with Actions, WireGuard, everything behind Cloudflare), tinker with Raspberry Pi and IoT projects, and 3D print whatever the current obsession demands.

My main side project is adsb-db, a worldwide flight data warehouse I built and run on a single 16-thread, 32 GB home server. It ingests around 37 million ADS-B position reports a day from community aggregators and my own receiver, keeps 9.2 billion of them queryable in 93 GB of Parquet (about 10 bytes a row), and derives 46 million flight legs across 575,000 aircraft. A phase-aware retention scheme gives roughly 4.8x compression over the raw feed with little loss of track fidelity, and it serves a read-only API with rule-based alerting. Most of the ongoing work is optimisation: the live fold went from 42% to 18% of a core, the test suite from 219 seconds to 49. Developed with heavy use of AI coding tools, which I treat as a force multiplier rather than a shortcut: specifications and tests first, agents doing the typing, me doing the reviewing.

Serial hobbyist: photography, sim racing, cooking, and whatever catches my eye next. Formula 1 fan. Mountains over beaches. Star Trek over Star Wars. Probably building something right now.