

Nicholas Blair

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Technical Captain · Cloud Systems Specialist · F# Evangelist

I am a hands-on, senior engineer with leadership experience. I specialize in building distributed backends, APIs and data-pipelines; delivering technical excellence with AWS. I have a keen sense for enablement, focusing on developer workflows and tooling to drive productivity across the stack.

I am passionate about F# because of its power to produce correct & concise code. I use functional programming principles at the macro-level, resulting in event-driven architectures that promise resilience and flexibility. I am comfortable designing and working with cloud-native systems, and often found by the whiteboard or coffee machine.

Head of Software Engineering @ ElasticStage Jun-Sept 2025

- Delivered AWS modernisation roadmap
Evaluated existing landscape and identified areas for improvement around ownership, deployment, config management, cost & scalability through **Terraform** setup iteration.
- Seeded CloudCannon + Astro CMS solution
Lead deep-dive discovery into modern CMS solution comparison. Decision criteria prioritised minimum TCO while **maximising page performance** and customisation options.

Staff Engineer @ TotallyMoney 2018-2025

- Embedded rapid-prototyping developer tooling
Designed and introduced scaffolding tool to reduce lead time-to-deployment and regulate CI & versioning in new projects targeting **Serverless Framework**.
- Ported legacy projects to AWS CDK
Migrated existing point-and-click infrastructure to IAC tooling, to improve operational processes, increase transparency, and reduce over-provisioning with **ECS Fargate**.
- Pioneered OIDC authentication pattern
Risk reduction of long-lived AWS tokens in deployment tooling (CircleCI & **GitHub Actions**). Solution built with IAC to enable a resilient DevOps approval process. Lead adoption across delivery teams through workshops and brown-bag sessions.
- Published open-source F# NuGet packages
Computation Expression libraries to support a **Railway-Oriented** programming model. Targeting async workflows & wide-event logging; AWS DynamoDB operations; JSON parsing & type-safe object composition.
- Track record of successful product feature delivery
High-throughput serverless webhook leveraging APIGateway & SQS; **Full-stack** admin portal with SSO login; Multi-client magic link login solution; comfortable working cross-functionally.
- Involved throughout hiring process
From initial calls to designing pairing exercises and code reviews.
- Speaker at F# meet up on DynamoDB
Presented DynamoDB wrapper library at in-person Functional Londoners Meetup 2019.

Tech Lead @ TotallyMoney 2016-2018

- Primary contributor to core MyAccount product

Designed and delivered containerised mono-repo with with NextJS frontend, C# backend, DbUp DB migrations, Traefik reverse-proxying, Playwright end-to-end testing, and rigorous build pipeline with CircleCI. The project has been contributed to effectively for 10 years.

- Architected business critical CRM scheduling platform for six-million customers

Developed a deep understanding of CRM team requirements by working closely with stakeholders. The system prioritised resiliency for self-healing and zero operational overhead.

- Hosted internal AWS workshops

Fostered a culture of knowledge-sharing to raise the team's level including AWS Parameter Store; Secrets Manager; ECS Fargate; Event Bridge & EB Pipelines; Step Functions; Lambda.

- Authored and optimised workflows in CircleCI

Drove wall-clock time reduction by leveraging parallelised build steps and Docker layer caching.

Senior Developer @ AdBrain 2016

- Big Data / Micro services / Azure

Senior Developer @ ThoughtWorks 2014

- Client-consultant context / Cross-functional teams

Senior Developer @ Media Ingenuity 2012-2014

Developer @ Wiggle 2011-2012

Developer @ Red Letter Days 2008-2011

Education

- Bsc Information Management & Computing @ Loughborough 2007
- Diploma of Professional Studies / Year in Industry @ Newham Corporate Council 2005

Skills

#dotnet #fsharp #csharp #aws #lambda #sqs #sns #cdk #eventbridge #dynamodb #sql
#oidc #typescript #circleci #github-actions #playwright #api-gateway #docker

[LinkedIn](#) / profile

blair55.github.io / blog

rightresu.lt / pet project