



STEVEN SHAW

Principal Software Engineer/Architect

Java · Scala · Kotlin · Haskell · Rust · TypeScript · AWS · GCP · Kubernetes

I design and build distributed systems that are scalable, resilient, performant, and maintainable.

As a Principal Software Engineer / Architect, I stay hands-on with code while guiding architecture for mission-critical platforms. My focus is on correctness, resilience, and developer happiness – enabling teams to ship continuously with confidence.

What I bring:

- Architecture & Delivery: lightweight agile methods, DevOps culture with a focus on Continuous Deployment and Continuous Delivery, cloud-native, microservices, Kubernetes, messaging, observability, Continuous Integration, automation
- Correctness & Reliability: shifting left with lightweight formal methods, static analysis, sophisticated property-based testing, automatic acceptance testing, infrastructure as code, and reproducible environments
- Proven impact: large-scale platforms in telecommunications, finance, and enterprise
- Team culture: nice guy and trusted mentor, raising engineering standards without ego

I thrive in collaborative environments where engineers tackle hard problems – and architecture is driven by working code, not just diagrams.¹

Key Technologies:

- Cloud Platforms: AWS, GCP
- Infrastructure & Orchestration: Kubernetes, AWS ECS, Serverless, Terraform, Pulumi, Helm, Nix
- Messaging & Streaming: RabbitMQ, SNS/SQS, Kafka, ActiveMQ; AMQP/Qpid (contributor); Event-Driven Systems
- APIs & Middleware: REST, gRPC, GraphQL, legacy systems (BEA Tuxedo, CORBA)
- Application Performance Monitoring & Observability: Datadog, New Relic, Prometheus, Grafana, OpenTelemetry
- CI/CD & Automation: GitHub Actions, Buildkite, CircleCI, GitLab, Jenkins; Automated Testing, Observability, Database Migrations, Rolling Upgrades
- Programming Languages: Java, Scala, Kotlin, Haskell, Rust, TypeScript
- Paradigms: Functional Programming (FP), Object-Oriented Programming (OOP), Domain-driven Design (DDD)
- Scripting: Python, Ruby, Bash, PowerShell

¹For an extended introduction, please see [this Gist](#).

Professional Experience

Domains

Startups, Finance, Travel,
Telecommunications,
Enterprise

Cloud Platforms

Google Cloud

Building, deploying, and
operating applications on
Kubernetes with GKE and
Compute Engine

Amazon Web Services

Event-driven architectures
with microservices built on
Lambda, ECS, SQS, SNS,
RDS, Postgres, and
DynamoDB

Tech Stacks

Backend/Data/Messaging

Postgres, MySQL, Redis,
RabbitMQ, DynamoDB,
Oracle RDBMS, Sybase, SQL
Server

Java

Spring, Hibernate, Java SE,
Java EE, Jakarta EE, EJB,
JPA, Servlets, JSF, JSP,
JUnit, Apache Camel,
Liquibase, IntelliJ

Scala

Scalaz, Slick, Play

Haskell

Yesod, Persistent, Servant,
Hspec, Tasty

CI/CD

GitHub, Bitbucket, CircleCI,
GitLab, Jenkins

Infrastructure as Code

Terraform, Pulumi, Helm,
Nix

Frontend

TypeScript, JavaScript,
HTML, CSS, Ember.js,
Angular, jQuery

Principal Software Engineer/Architect/Consultant

TLC SRC • 2003 – Present

Consulted with a diverse range of clients including Caterpillar, Tweag, Input Output (IOHK), Juspay, Betterteam, Flight Centre, Suncorp, TNS (now Mastercard), Eiger Systems (now Experian), JPMorganChase, T-Mobile UK (now EE), Singtel Optus, and TransCore (now Transmax). Roles spanned the full software development lifecycle: architecture, design, coding, testing, deployment, and site reliability.

Skills: Cloud, microservices, Kubernetes, REST APIs, messaging, DevOps, functional programming, Java, Scala, Haskell, TypeScript, Python, C#, .NET, Terraform, Nix.

Principal Software Engineer

Ephox (now Tiny) • 2013 – 2014 • [tiny.cloud](#)

Building rich-text editors for the web.

Skills: JavaScript, Scala, Java, TypeScript, functional programming, microservices, REST APIs, DevOps, Postgres.

Staff Software Engineer

ADC (now CSG) • 1999 – 2003 • [csgi.com](#)

Highly customisable billing and customer relationship management solutions for the mobile telecommunications industry.

Skills: Java, C++, C, BEA Tuxedo, BEA WebLogic, Oracle RDBMS, TCP/IP.

Senior Software Engineer

Dialog (now NCS) • 1993 – 1998 • [ncs.co](#)

Software Engineer

CITEC • 1990 – 1992 • [citec.com.au](#)

Education

Master of Information Technology

Queensland University of Technology
GPA 6.0 of 7.0

Bachelor of Applied Science (Computing)

Queensland University of Technology
GPA 5.2 of 7.0

Professional Development²

Kotlin for Java Developers

JetBrains, Coursera • Jul, 2023

Engineering Chapter in Technical Leadership

Folklore Ventures • May, 2023

Type-level programming with GHC

Andres Löh, Well Typed • Oct, 2019

Scalable Microservices with Kubernetes

Kelsey Hightower, Google • Feb, 2017

Real-time Stream Processing with Rx

Erik Meijer & Brian Beckman • Dec, 2012

Functional Programming Principles in Scala

Martin Odersky, EPFL • Nov, 2012

Advanced Scala

Miles Sabin, Chusai • Oct, 2012

Compilers

Alex Aiken, Stanford • Jun, 2012

Introduction to Scala

Workingmouse • Sep, 2008

²See this [Gist](#) for a more comprehensive list of professional development including talks I have given.