



# STEVEN SHAW

## Senior Software Engineer

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

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

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.<sup>1</sup>

### 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

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

# Professional Experience

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## 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

## Senior Software Engineer/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 Development<sup>2</sup>

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## 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

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