
Samuel Doward

Senior/Staff Software Engineer

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PROFILE

Engineer with over 15 years of experience delivering consumer and mission-driven products. Experienced across backend and platform engineering, with a career that has evolved from deep specialisation in Android development to broader ownership of complex systems and architecture. Strong focus on understanding user needs, finding simple solutions to complex problems, and building consensus around technical decisions.

EXPERIENCE

Senior Engineer | EIDU, Berlin

01.2025 - present

Joined to support the transition from a single application to a broader education platform. Contributed across the product offering, from user-facing feature development to foundational platform engineering.

Key Contributions

- **Observability:** Led the introduction of OpenTelemetry and a unified observability stack using Grafana, Tempo, Prometheus and Loki, moving beyond AWS-based logging to provide distributed tracing, metrics and centralised logging across the platform.
- **Multiplatform Synchronisation:** Architected a client-side synchronisation mechanism leveraging event sourcing, Kotlin Multiplatform and TypeScript to enable offline functionality and dynamic data discovery across distinct application experiences.
- **Teacher-Led Assessments:** Introduced a new assessment type that extends the existing automated assessment system to support direct interaction between teachers and learners.
- **Kubernetes Migration:** Migrated the synchronisation service to Kubernetes, replacing AWS-specific dependencies with cloud-native alternatives to improve portability and reduce vendor lock-in.
- **AI Engineering Enablement:** Designed and built a centralised system for distributing coding standards and reusable AI skills across engineering teams, promoting consistent LLM-assisted development practices.

Senior Engineer | UN World Food Programme, Berlin

06.2017 - 12.2024

A driving force behind ShareTheMeal's transformation from a volunteer-built MVP into a mature product serving over one million users and raising more than €100 million in donations. Joined as an Android developer, progressively expanding responsibilities into backend development and internal systems as the product scaled.

Key Contributions

- **Android Modernisation:** Modernised the Android application through migration from Java to Kotlin, introduction of a layered architecture, continuous integration and comprehensive automated testing, including screenshot and end-to-end tests.
- **Engineering Practices:** Established trunk-based development, automated releases and a release train, alongside introducing retrospectives and Scrum to improve engineering collaboration and delivery.
- **Backend Architecture:** Led the design of API v3, using domain modelling to establish a clearer foundation for evolving backend services.
- **Product Development:** Delivered key user-facing features, including taking the flagship donation picker from proof of concept to production.
- **Payments Modernisation:** Contributed to the development of a new payment system supporting European 3-D Secure requirements.

Earlier Experience 2011–2017

Held software engineering roles across startups and established technology companies, including SoundCloud and Allryder. Worked on large-scale products within established engineering teams and led greenfield projects from inception to production.

TECHNOLOGY

Languages: Kotlin, Java, TypeScript

Backend & Data: Ktor, Kafka, PostgreSQL, MongoDB, Node.js

Platform & Infrastructure: Kubernetes, Docker, OpenTelemetry, Grafana, AWS

Mobile: Android SDK, Kotlin Multiplatform, Jetpack Compose, Coroutines

Quality & Delivery: GitHub Actions, Gradle, JUnit, CI/CD

EDUCATION

BSc (Hons) Computing — Sheffield Hallam University

FdSc Business Computing — Sheffield Hallam University