

Tom Regan

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Profile

I am a Staff Software Engineer with 10+ years' experience designing and building high-scale systems, from finance to automated logistics. Lately I've built and shipped my own app, and now I am looking for new opportunities to work on challenging problems in a collaborative environment. I'm used to working on complex cross-functional projects where constraints are tight, and I have a proven track record of delivering high-quality software, iteratively, and on time. I enjoy building systems that other developers love to work on, which are reliable, and efficient to maintain. I'm also handy when it comes to investigating and fixing performance bottlenecks, finding the right technology-fit for scaling issues, and occasionally, designing really neat solutions to tricky problems.

Experience

Nutshell

Director

May 2025—Present

Acted as a Company Director & Software Engineer for Nutshell. Making cost-effective technical decisions, integrating AI into project & engineering workflows, and prioritising work that delivers the biggest impact has made Nutshell a success. Gained experience developing for product-market fit. Nutshell is distributed online & on the App Store.

- Created an ultra low-cost Cloud-Native back-end, successfully migrated between cloud providers.
- Integrated with Single Sign-on, Payments, & a Content Management System.
- Built an Expo/React Native Mobile App & shipped to the App Store.
- Developed a React/Typescript Web App, dashboards & management tooling.

Ocado Technology

Staff Software Engineer (E4), Fulfilment

December 2021—May 2025

Led engineering initiatives within the Fulfilment cluster, building production systems and internal tooling for Ocado's automated Customer Fulfilment Centres (CFCs). Worked across teams as a senior individual contributor, mentoring engineers, supporting cross-site observability, and improving developer experience at scale.

- Redesigned the event cache in Hive Manager, a per-site control & monitoring system for automated CFC operations, to handle 10,000 updates per second, cutting per-event latency by 95% (40 ms - 2 ms), eliminating multi-minute availability failures and enabling AWS cost savings.
- Amplified observability via advanced monitoring dashboards and established SLOs with Apdex metrics, accelerating fault diagnosis and proactive remediation.
- Delivered two-part hands-on workshops for 15+ new engineers on large codebases and IDE workflows, part of Ocado's [Recode Your Career](#).
- Mentored a junior engineer over two years, establishing development goals, hosting regular one-on-one sessions, and running technical book-club discussions, culminating in their successful placement in a new team role.
- Designed and architected Hive Workspace, a multi-tenant operations console, and led the migration of Engineering Operations Landing Page, reducing per-site deployments from 20+ to 1 and cutting recurring costs from \$600/month to \$25/month.
- Introduced modular feature packages in Global Monitoring & Support, a multi-site control & monitoring dashboard, to promote maintainable code and consistent release cycles.
- Streamlined developer workflows by integrating Spring framework, Docker and Maven best practices, reducing new team-member onboarding time from one day to one hour.

Senior Software Engineer (E3), Fulfilment

June 2020—December 2021

Engineered Scala-based fulfilment systems for both CFCs and in-store applications. Took ownership of developer enablement initiatives, security processes, and CI/CD automation across teams.

- Developed proficiency in Scala to support CFC and in-store fulfilment applications, demonstrating adaptability and continuous learning.
- Overhauled Security Issue Management, accelerating vulnerability remediation cycles and tightening release cadence.
- Automated key developer workflows with Ansible-based CI/CD scripts, elevating productivity across two teams.
- Authored comprehensive runbooks and developer guides, cutting new team-member onboarding from 3 days to 1 day.

Worldpay

Senior Engineer (D2), UK Engineering

April 2019—June 2020

Worked on service infrastructure, automation, and internal tooling to improve developer workflows and system reliability across UK Engineering.

- Introduced OpenAPI 3.0 documentation to the microservice suite.
- Introduced Ansible and WLST scripting to automate infrastructure deployment.
- Streamlined manual setup into a single-step operation via Ansible playbooks, bringing reproducibility to developer set-up.
- Introduced unit testing for PL/SQL development using utPLSQL.

Ocado Technology

Senior Software Engineer (SE3), E-commerce

April 2016—April 2019

Delivered platform features to improve e-commerce performance and scalability. Led initiatives on user authentication and load testing capabilities.

- Measured performance of the product search endpoint and migrated to a faster serialisation library, improving user experience.
- Developed OAuth2/OIDC-based authentication to replace form-based authentication.
- Led a 3-engineer team to build a load-testing framework to validate “orders per week” capacity.

Caplin Systems

Software Engineer, Platform, Integration, Client Services

April 2013—March 2016

Developed SDKs and protocol libraries for high-throughput trading platforms. Delivered bespoke client solutions and technical training internally and externally.

- Engineered a trading integration SDK for high-concurrency, high-availability systems processing thousands of messages per second.
- Collaborated on core product development of network protocol libraries and SDKs, working hands-on with customers on site to deliver bespoke client solutions.
- Delivered methodical classroom-based training—both internal and external—demonstrating strong interpersonal skills and fostering knowledge transfer.

Junior Software Engineer

October 2011—April 2013

Completed the graduate program with experience in development, test, release engineering and customer support.

Education

Birkbeck College, University of London

September 2010—September 2011

MSc, Computer Science

Distinction

King's College London, University of London

September 2003—June 2006

BA, English Language and Literature

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Skills

Languages: Java, Typescript, Python, Go, C.

Frameworks & Tools: Spring Boot, React, Next.js, Astro, Terraform, Postgres, AWS, Cloudflare, Docker, Claude Code, Codex.

Technical Standards: HTTP & Internet RFCs, REST, HATEOAS, SQL, UUID, ULID, ISBN, POSIX, OIDC, OAuth2

Soft Skills: Accessibility, Mentoring, Technical Writing, Team Enablement, Developer Onboarding.

References & Further Details

Referees' details gladly provided on request. Some examples of coding are hosted online at github.com/TomRegan.