

Karl Wills

Senior Front-end Engineer

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Over a decade building the front-end of high-traffic e-commerce platforms, I specialise in React, TypeScript, and design systems that scale. I lead technical initiatives, mentor engineers, and partner with product and design to deliver accessible, production-ready experiences for millions of users.

EXPERIENCE

Rapha CONTRACT

Senior Front-end Software Engineer

Oct 2025 – Apr 2026

- Established and integrated the design system, driving architectural decisions to connect an existing component library to design tokens via a Figma to Style Dictionary pipeline, collaborating closely with designers to deliver a full rebrand across the Rapha website.
- Refactored components to be fully accessible, ensuring compatibility with assistive technologies and adherence to WCAG 2.2 AA standards.
- Led a comprehensive accessibility audit, resolving issues across the codebase, embedding best practices into team processes, and publishing an accessibility statement to formalise an ongoing commitment to compliance.
- Led the development of a new RCC membership sign-up page, implementing the updated Rapha brand theme and integrating Motion and React Hook Form to deliver fluid micro-interactions, animated UI elements and a seamless form experience, enhancing the overall engagement of the sign-up flow.
- Provided technical leadership across front-end architecture decisions, reviewing pull requests, advocating for accessibility-first practices, and supporting team upskilling on the design system and token pipeline.
- Partnered closely with product, design, and brand stakeholders to translate complex rebrand requirements into a phased technical delivery plan, communicating architectural trade-offs and progress to non-technical audiences.

TECH USED

Next.js React TypeScript Jest Storybook Playwright Testing Library Figma Style Dictionary Motion React Hook Form Gi

Pets at Home CONTRACT

Senior Front-end Software Engineer

Aug 2023 – Oct 2025

- Played a key role in the re-platforming of the legacy Pets at Home website to a Next.js front-end. This supported double digit online sales growth on a website with 7M+ monthly visitors.
- Integrated RESTful APIs for in-store barcode scanning, improving customer transaction speed and bridging in-store and online experiences.
- Built charity donation integration into the checkout flow via RESTful APIs, allowing members to select a preferred recipient at point of sale.
- Redesigned the customer account billing and subscription management dashboard, simplifying complex recurring-payment flows and driving measurable growth in Easy Repeat subscriptions.
- Built several reusable components for the internal UI design system, including accessibility audits and fixes to comply with WCAG AA standards.

TECH USED

Next.js React TypeScript Jest Storybook Playwright TanStack Query Zustand Azure Testing Library Cucumber Figma

BrewDog CONTRACT

Senior Front-end Software Engineer

Aug 2022 – Jul 2023

- Migration of checkout and customer account experiences to a headless Next.js architecture with React, TypeScript and Tailwind CSS, managing complex state across payment and account flows.

- Untappd API integration as part of 'Collabfest', allowing customers to find beer on tap in BrewDog bars across the UK and filter by rating.
- Converted Figma prototypes into dynamic React components, ensuring design fidelity and rapid iteration.
- Using Contentful as a CMS and designing content blocks to allow the marketing team to create pages on demand.
- Craft Beer Advent Calendar spoilers feature, allowing members early access to view calendar contents and order with exclusive pricing.

TECH USED

Next.js React SWR Tailwind Storybook Jest Figma

Doddle PERMANENT

Senior Front-end Software Engineer

May 2022 – Aug 2022

- Development of an embeddable location finder widget for global merchants.
- Mentoring of junior developers to increase knowledge within the team.
- Defined coding standards, critiqued pull requests and encouraged best practices to ensure high code quality and test coverage.
- Drove codebase accessibility audit, improving overall widget usability and alignment with WCAG standards.

TECH USED

React Jest Cypress JavaScript Node.js Testing Library

The Modern Milkman PERMANENT

React Software Engineer

Aug 2021 – May 2022

- Greenfield development of bespoke e-commerce platform.
- Implementation of reusable and fully accessible design system.
- Defined coding standards and testing practices to ensure high code quality and test coverage.
- Collaboration with internal design team to ensure accessible and user-centric design was considered from the start.

TECH USED

React Next.js Jest Testing Library Mock Service Worker Styled Components Storybook

Blue Prism PERMANENT

UI Developer

Jan 2021 – Aug 2021

- Development of the Blue Prism automation application built with Electron.
- Creation of UI components for existing component library.
- Unit testing of new and existing UI component functionality.
- Mentoring of junior developers and pair programming to increase knowledge within the team.

TECH USED

React Electron Storybook CSS Modules Jest

The Very Group PERMANENT

Front-end Software Engineer

Mar 2019 – Jan 2021

- Development of new UI components using React and Storybook, as part of the website rebuild.
- Unit testing of new/existing UI component functionality using Jest and React Testing Library.

TECH USED

HTML CSS JavaScript GitHub Adobe Express Sass Storybook

TECHNICAL SKILLS

LANGUAGES & FRAMEWORKS

TypeScript JavaScript HTML5 CSS3 React Next.js (Pages/App Router) Node.js Tailwind CSS Sass Styled Components Van

TESTING

Jest React Testing Library Playwright Cypress Mock Service Worker Storybook Cucumber

PRACTICES

Front-end architecture Design systems RESTful API integration State management Accessibility (WCAG 2.2 AA) Performance optin

TOOLS & PLATFORMS

Git GitHub GitLab Bitbucket Azure Repos Figma Style Dictionary TanStack Query SWR Zustand React Hook Form Motio

CERTIFICATIONS

Verified Certificate for Introduction to Web Accessibility

edX · 2020

Scrum Foundation Professional Certificate (SFPC)

Certiprof · 2020

REFERENCES

Gabes Mak

Front-end Lead — Rapha

Kevin Varley

Lead Cloud Engineer — Rapha

David Jones

Front-end Lead — Pets at Home