KARL NEWARK

Senior Software Engineer – Specialist in Design Systems
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Summary

User-focused engineer with 8+ years of experience building scalable UI platforms, shared component libraries, and design systems. Proven track record of leading cross-functional teams, enhancing accessibility and performance, and modernising large-scale frontend architecture. Passionate about seamless developer experience and design consistency.

Skills

Frontend: HTML, JavaScript (ES6+), TypeScript, React, CSS / SASS, Storybook, Nunjucks, Alpine.js
Backend: Node.js, C#, SQL Server, MySQL, MongoDB
DevOps & Tooling: Jenkins, GitLab, CI/CD, AWS, Docker
Other: Design tokens, accessibility, Figma, analytics implementation, UI test tooling

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Experience

Compare the Market (BGL) — Senior Software Engineer
Feb 2022 – Present

- Built a reusable validation library that standardised invalid states, accessibility, and messaging via a consistent API. Integrated existing server-side JSONLogic rules to enable consistent client-side validation across teams
- Took ownership of design system rollout coordination across the organisation, collaborating closely with UX and product teams to ensure alignment and adoption.
- Act as technical lead within the design system team — mentoring engineers, guiding implementation decisions, and maintaining infrastructure health.
- Worked with designers and product managers to prioritise and deliver accessible, performant components that met evolving business needs.
- Temporarily served as the sole contributor during a transitional period, ensuring continuity of roadmap delivery and onboarding new team members.
- Led improvements to deployment pipelines and test infrastructure to increase browser/device coverage and enable documentation versioning across the design system platform.

Compare the Market (BGL) — Software Engineer
Nov 2018 – Feb 2022

- Migrated legacy Angular application to React for the Home Insurance product.
- Worked with UX and product to increase user engagement through design improvements.
- Promoted to Senior Engineer after driving componentisation and accessibility across teams.

ADP — Software Engineer
2015 – 2018

- Delivered scalable UI for payroll and HCM in a regulated environment.
- Led low-risk UI initiatives through SWAT team based on client feedback.
- Introduced unit testing frameworks and contributed to Angular migration.

Freelance & Early Career

- *Welldoing.org* (2014) – Sole developer for directory product (Angular/PHP/MySQL).
- *Zazzle Media* (2014) – WordPress plugin intern; focused on SEO and plugin delivery.

Education

Anglia Ruskin University, Cambridge

BSc Computing and Information Systems (1st Class Honours)

2012 – 2015

Leader of hackathon society; coursework in UI design, DB optimisation, C#/Java/PHP

Personal Projects & Involvement

- Home automation builds using Raspberry Pi + custom JavaScript dashboards.
- CI/CD pipelines with Docker, Jenkins, GitHub Actions.
- Organiser & speaker at Peterborough STEM Festival and local developer meetups.