Lloyd Richards

Design engineer turning complex data and product workflows into clear React interfaces.

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Executive Summary

Design engineer with 6+ years building data-rich web products. I turn supplied key screens into responsive, accessible flows by defining how components behave between breakpoints and advocating for mobile-first choices. I build React and TypeScript component systems that stay consistent across products.

- Defined responsive behavior between key screens and checked interface decisions against WCAG requirements
- Built the OECD Competitiveness Data Hub, then developed a shared, themeable component system for a second policy platform
- Built charts with semantic HTML tables and D3 SVG, plus shared UI components, for Switzerland's Cancer Monitoring Dashboard

Technical Skills

Interaction Design, Responsive Design, Accessibility (WCAG), Design Systems, TypeScript, React, Next.js, D3.js, Storybook, Figma, Tailwind, Node.js

Experience

Interactive Things — Professional Interaction Engineer

Feb 2023 Present

Build interactive data products for public-sector and enterprise clients, working across frontend architecture, data, and UI with designers and researchers.

- Sole developer on the 1100+ page OECD Competitiveness Outlook Data Hub, recognized by the Swiss Viz Awards and German Design Award
- Defined responsive component behavior between supplied key screens, advocated for mobile-first layouts, and checked decisions against WCAG requirements
- Built a shared, themeable component library used across three OECD applications; advocated for design tokens and lint rules to keep overrides intentional
- Developed semantic-table-backed D3 charts for Switzerland's Cancer Monitoring Dashboard and mentored an intern through pairing and code review

Vatorex AG. — Data Visualization Specialist

Apr 2021 Jan 2023

Owned design and development of digital products for an IoT beekeeping platform serving 500 users and 10,000 connected hives.

- Built a cross-platform Flutter app to replace separate Swift and Kotlin apps, reducing feature delivery time from months to weeks
- Designed dashboards for beekeepers and internal research teams using daily sensor data
- Mentored a mobile developer while iterating on the app's UI and backend

Vatorex AG. — Data Visualization Intern

Oct 2020 Mar 2021

First design-focused hire. Audited the web, Swift, and Kotlin apps and created the company's first design system to bring their UI patterns together. Worked with developers to implement consistent components.

Interactive Things — Data Visualization Intern

Jan 2020 Jul 2020

Prototyped data interactions and developed visualizations for client-facing dashboards in collaboration with designers and engineers.

Lloyd Richards Design — Regenerative Garden Designer

Apr 2016 Oct 2018

Ran an independent ecological design practice. Managed 26 projects from client brief through design and construction, and created visual plans to explain multi-year work to clients.

Key Projects

Competitiveness Outlook Data Hub (2024)
Built an interactive policy data hub with responsive D3 visualizations and an interface spanning 1100+ pages.

SME Policy Index (2026)
Extended the OECD interface into a second platform through semantic design tokens and shared components while preserving the first application.

Cancer Monitoring Dashboard (2024)
Built semantic-table-backed D3 charts for public health data, balancing dense information with accessible navigation.

Outlier Micro Frontend (2024)
Built a local-time conference schedule and a submission and approval flow for attendee-led sessions.

Education

- **Master of Architecture, Environmental Design (1 year),** University of Calgary
  Sep 2012 Apr 2013
- **Bachelor of Arts (Multidisciplinary),** University of Calgary
  Sep 2006 Apr 2011

Community & Volunteering

- **Organizer,** Data Visualization Zurich MeetUp
  Oct 2023 Present
- **Events Committee Member (2024),** Outlier Conference
  Feb 2024 Aug 2024