

## Profile

Expert frontend architect and engineer with 20+ years building accessible, high-performance web products. Deep expertise across React, Angular, and Vue, with accessibility (WCAG) treated as a craft in every project rather than a checkbox. Lately I work intensively with AI-augmented engineering: spec- and test-driven development plus vertical slices (tracer bullets) that agents implement autonomously — planning and QA stay human-led. Member of the teams behind multiple Best of Swiss Web-winning projects, including three Master awards. Recent clients include SBB, MediData, PwC, and CSS; SBB re-engaged me across three assignments over six years.

## Recommendation

"An outstanding expert, advisor, and mentor. His engagement ran to 15 months, far beyond the planned duration. I can highly recommend him."

Dr. Frank Navrade, Director Digital Factory, PwC Germany

## Skills

**Frontend Architecture:** Design Systems, Component Libraries, Storybook, Micro-Frontends, Module Federation, Monorepos (Turborepo), Atomic Design

**React & Next.js:** React, React Native, Next.js (Server Components, Server Actions, ISR, SSR, caching), Redux Toolkit, Zustand, Jotai

**AI-augmented Engineering:** Claude Code, Cursor, GitHub Copilot, custom AI agents & skills, spec- and test-driven development, vertical slices (tracer bullets), ADRs

**Accessibility (A11y):** WCAG, accessibility audits, accessible component engineering, training & workshops

**Angular & Vue:** Angular, RxJs, NgRx, Signals, Ionic, Vue.js, Nuxt

**Performance & SEO:** Core Web Vitals, Lighthouse, rendering & caching strategies, SEO compliance

**Languages & Backend:** TypeScript, JavaScript (ES6+), Node.js, PHP, Symfony, Doctrine

**APIs, Data & Testing:** REST, GraphQL, tRPC, OpenAPI, PostgreSQL, Drizzle, Prisma; Vitest, Playwright, Jest, Cypress

**Architecture & Leadership:** Solution architecture, Domain-Driven Design, Clean Architecture, team leadership, mentoring, code reviews

## Experience (Selection)

### Expert Frontend Architect & Engineer — SBB / Intersim (Swiss Federal Railways)

2020 – 2026 (three assignments)

Three separate assignments over six years, not one continuous mandate. First component work in the Lit-based design system of the SBB web platform, later advisory and code reviews for the development team, most recently feature development in RedaSys, SBB's in-house editorial system.

- Feature development in the RedaSys Next.js article editor with React 19, meeting SBB's performance and usability standards
- Designed and built a new newsletter module in RedaSys replacing an external third-party tool: per-type widget entities, two-pass rendering with per-recipient personalization, multi-language compositions
- Automated testing with Vitest and Playwright, component work in Storybook
- Advisory on rendering strategies (SSR, ISR), caching, security, and accessibility
- Authored architecture decision records and specs precise enough for AI agents to execute on their own, while architecture and quality stayed with the engineers
- Implemented and adapted components in the design system, migrated whole areas of the website to WCAG conformance without breaking the corporate identity; plus code reviews and mentoring in the team

**Technologies:** TypeScript, React 19, Next.js 16, SSR, ISR, Vitest, Playwright, Cypress, Storybook, Lit, Web Components, Symfony, PHP, Doctrine ORM, Twig, Accessibility (WCAG), Architecture Decision Records, CI/CD, Kanban, Scrum

### Expert Frontend Architect & Engineer — MediData

December 2024 – July 2025

As React expert in an enabling team, I contributed substantially to building a flexible DataGrid used across 5+ standalone customer portals for hospitals, insurers, practices, and patients, each integrated as a micro-frontend into a shell application.

- Built a portal-agnostic DataGrid that holds up across heterogeneous APIs and data models
- Established a Storybook component library plus development and testing guidelines for multiple teams
- Defined accessibility guidelines and ran the related training sessions

**Technologies:** React, TypeScript, Storybook, Micro-Frontends, Module Federation, Tailwind CSS, Vitest, Playwright, Accessibility (WCAG)

## Expert Frontend Architect & Engineer — Atelier Irmak

January 2024 – November 2024

Led a small senior team to deliver a custom CRM end-to-end on a modern Next.js stack, covering customer relations, marketing, sales, billing, and product management.

- Owned the full system architecture and delivery
- Built on Next.js (Server Components, Server Actions) with Drizzle/Postgres and Clean Architecture principles, end-to-end type-safe
- Integrated AWS, Contentful, Clerk, Stripe, and Sentry across the stack

**Technologies:** Next.js, React, TypeScript, Drizzle, Postgres, Tailwind CSS, ShadCN, Vercel, Sentry, GraphQL

## Expert Frontend Architect & Engineer — PwC Germany

August 2022 – December 2023

Hands-on adviser, coach, and architect for PwC Germany's Digital Factory teams on state management, performance, best practices, and frontend architecture.

- Designed a React micro-frontend architecture using monorepo and module federation, and ran several workshops on it
- Built a lean Next.js eCommerce solution for trading environmental certificates, focused on security and end-to-end type safety
- Analyzed and refactored a complex Angular application, then delivered a best-practices workshop

**Technologies:** React, Next.js, Angular, TypeScript, Module Federation, Monorepo, Turborepo, tRPC, Storybook, Performance Optimization

## Expert Frontend Architect & Engineer — CSS Insurance

April 2018 – June 2020

Three major projects, including the CSS website relaunch that won Best of Swiss Web Master 2021, with a styleguide, component library, and a strong focus on user guidance and accessibility.

- Built the styleguide, component library, and all components for the award-winning relaunch
- Developed a complex individual health-insurance premium calculator from scratch
- Contributed to the myCSS customer app: authentication, profiles, and document upload

**Technologies:** Angular, TypeScript, RxJs, NgRx, SCSS, Accessibility (WCAG), Cypress, Ionic

## Selected earlier work — Coop AG, Unic, Vitra Design Museum

Senior Frontend Engineer / Developer, 2012 – 2018

Frontend work at scale for leading Swiss brands, much of it award-winning.

- Microspot / Interdiscount (Coop AG): React eCommerce webshop with SSR and SEO focus — Best of Swiss Web Silver 2018
- Unic AG: SBB.com relaunch (Master 2012) and PKZ – TheLook (Silver 2012), plus the Swiss.com relaunch (Master 2015)
- Vitra Design Museum: two React SPAs — a collection guide and a mobile Schauderpot guide — with GraphQL and Relay

**Technologies:** React, Next.js, GraphQL, SSR, SEO, TypeScript, Vue.js, Nuxt

## Awards

|      |               |                      |                     |
|------|---------------|----------------------|---------------------|
| 2021 | <b>Master</b> | CSS Relaunch         | CSS Insurance       |
| 2018 | <b>Silver</b> | Microspot.ch Webshop | Microspot / Coop AG |
| 2015 | <b>Master</b> | Relaunch Swiss.com   | Hinderling Volkart  |
| 2012 | <b>Master</b> | SBB.com Relaunch     | Unic AG             |
| 2012 | <b>Silver</b> | PKZ – TheLook        | Unic AG             |

## Education

|      |                        |                                |
|------|------------------------|--------------------------------|
| 1998 | University of Bern     | Bachelor of Political Sciences |
| 1990 | University of Freiburg | Bachelor of Art History        |

## Further Profiles

**LinkedIn:** [linkedin.com/in/nenadbrbic](https://www.linkedin.com/in/nenadbrbic)

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