Mark E. Curtis Front End Architect | 14+ Years of Engineering Leadership Phoenixville, PA | mark_c@markecurtis.com | (267) 242-7474 | www.markecurtis.com

SUMMARY Strategic Software Architect with 14+ years of experience delivering scalable, high-conversion web applications. Expert in modernizing legacy architectures and building high-performance systems using Vue.js, TypeScript, and SSR. Proven track record of driving $10M+ in annual revenue through UI/UX optimization and saving $2M in costs via custom internal tooling. Dedicated to accessibility, developer efficiency, and big-picture business outcomes.

CORE SKILLS

- **Frameworks/Languages:** Vue.js (Expert), TypeScript, Angular 20, React 19, Node.js, Tailwind 4, SASS, PHP, HTML5/CSS3.
- **Architecture & Ops:** Server Side Rendering (SSR), Progressive Web Apps (PWA), Component Libraries (NPM), Docker, CI/CD, Micro-frontends, Design Systems.
- **Tools:** Figma, Jira, Git, Zeplin, Google Analytics, Socket.io, Adobe Creative Suite.
- **Leadership:** Mentorship, Code Reviews, Cross-departmental Strategy, Web Accessibility (A11y).

PRINCIPAL ARCHITECT & SYSTEMS RESEARCHER (INDEPENDENT) Phoenixville, PA | February 2025 – Present

- **2026 Enterprise Stack R&D:** Executed architectural research and production-grade implementation of Angular 20, React 19, and Tailwind 4, ensuring parity with current industry deployment standards.
- **Full-Stack DevOps & Orchestration:** Engineered a high-availability deployment framework using Docker, Docker Compose, and Makefiles, achieving "one-command" environment parity across local and cloud-based staging.
- **Real-Time Systems Engineering:** Architected and deployed a multiplayer gaming engine utilizing Socket.io and Node.js, implementing complex state-management for concurrent user interactions.
- **Immersive UX Design:** Developed Vue-based applications leveraging browser-native APIs for spatial audio and haptic feedback, optimizing for the latest mobile hardware capabilities.
- **Rapid Prototyping:** Built and scaled a suite of utility tools focusing on Tailwind for high-speed UI iteration and responsive performance.

PROFESSIONAL EXPERIENCE Uncommon Goods | Brooklyn, NY Front End Architect (Promoted from Senior Web Developer) | July 2013 – February 2025

- **Revenue Growth ($10M+):** Leveraged Google Analytics and A/B testing to optimize UI/UX, resulting in a sustained $10M+ annual revenue increase.
- **Architecture Modernization:** Spearheaded the transition from JSP/jQuery to a modern, SEO-optimized SSR stack (Vue/Angular), maintaining 100% uptime during the migration.

- **Developer Efficiency (10x):** Built and maintained two proprietary component libraries (NPM) and developed a Node.js/Shell scaffolding framework that reduced time-to-market for new features by 10x.
- **Cost Savings ($2M):** Engineered internal admin hooks that allowed non-technical departments to manage content, saving $2M in annual development overhead.
- **Performance & SEO:** Converted core pages to PWA, resulting in a 35% increase in return users and a 15% boost in SEO rankings.
- **Fintech & Checkout:** Rebuilt the checkout funnel from scratch, integrating Apple Pay and Dynamic Delivery logic, increasing conversion by 10%.

iHeartMedia | Manhattan, NY **Front End Developer** | June 2010 – June 2013

- Developed high-traffic interactive experiences and contests for global brands including Coca-Cola and Virgin.
- Doubled Z100's Google+ following (from 300k to 600k+) through engagement-focused UI design.
- Consulted on the mobile-responsive transition for Jingle Ball and other flagship properties.

EARLY CAREER

- **AECOM Consult | Visualization Specialist:** Developed 3D simulations and urban planning websites.
- **Niki Jones Agency | Animation Specialist:** Redesigned client websites and executed brand reviews.

EDUCATION

- **Bachelor of Science, Media Arts & Animation** | The Art Institutes, Philadelphia, PA
- **Associates, Specialized Technology** | Bradley Academy for the Visual Arts, York, PA