BROWSER ENGINEERING · ACCESSIBILITY · WEB STANDARDS

Jacques Newman

Senior software engineer building browser features, working on browser internals and accessibility, and contributing to web standards.

jacquesnewman@outlook.com
github.com/janewman
Greater Seattle Area

EXPERIENCE

Microsoft — May 2017–Present

Senior Software Engineer · Microsoft Edge Web Platform

Senior Software Engineer, Sep 2024–Present · Software Engineer II, Mar 2019–Sep 2024 · Software Engineer, May 2017–Mar 2019
Selected projects and responsibilities

Web APIs & Standards — 2025–Present

- Led Microsoft's `focusgroup` work from reviving the proposal through implementation and shipment in Chromium 150, enabling declarative keyboard navigation for composite widgets. Authored the Open UI explainer and specification proposal and advanced it to WHATWG Stage 2.
- Completed the Chromium implementation and ARIA specification work for ARIA Notify, shipped in Chromium 141, enabling web applications to request screen-reader announcements without DOM updates.
- Implemented and enabled `aria-actions` by default in desktop Chromium across Windows and macOS accessibility APIs.
- Represent Microsoft in ARIA, Open UI, and WHATWG. Contribute to HTML accessibility mappings and cross-browser interoperability with browser vendors, assistive-technology partners, and web developers.

Edge Copilot Vision & Quality — 2024–2025

- Added pointer-based context to Copilot Vision using Blink hit-testing to identify nearby text and images for the language model. Prototyped element, image, and fuzzy-text highlighting across browser and service codebases.
- Built a shared quality dashboard that helped Edge's consumer Copilot teams identify failures and evaluate fixes.

Browser Accessibility Infrastructure — 2019–Present

- Helped build accessibility infrastructure for browser UI and web content through the ViewsAX refactoring, including a shared UI layer and cache.
- Owned Chromium changes supporting Narrator's use of Windows UI Automation (UIA) TextPattern, including text navigation, text ranges, event reliability, and UIA tree testing.
- Implemented and shipped MathML support for Windows UI Automation in Chromium.
- Built accessibility usage and performance telemetry that informed investment decisions and helped diagnose unexpected accessibility activation. Added fuzzers and automated tests to catch regressions.
- As a Chromium Accessibility owner, resolve security vulnerabilities, release-blocking crashes, compliance defects, and cross-product regressions. Mentor engineers through code review and debugging. Led and co-led mentoring groups.
- Led Accessible Shopping Navigation from architecture and user research through prototyping and experimentation, then recommended against shipping based on the results. Lead inventor on U.S. Patent 12282522, “Assistance user interface for computer accessibility.”

Chromium Layout / GridNG — 2020–2021

- Contributed foundational track-collection data structures and launch-critical fixes to Chromium GridNG, including replaced-element sizing and web-platform tests for CSS Grid interoperability.

Microsoft Edge Layout & Collections Prototyping — 2017–2019

- Improved EdgeHTML formatting and layout reliability, memory efficiency, and CSS interoperability.
- In 2018, prototyped Collections (then called Scratchpad) in JavaScript and React using Chromium's extension model. Researched and helped write Chromium implementation recommendations for the team taking over the feature.

Lead Teacher, ProjectFUN · DigiPen Institute of Technology — 2014–2015
Taught Java game development, including basic linear algebra, to high-school students and coordinated five teaching assistants.

EDUCATION

DigiPen Institute of Technology — Apr 2017

B.S., Computer Science & Real-Time Interactive Simulation
Minor in Mathematics