joelmckinnon@new-worlds.org
650-619-3141

Joel McKinnon, CPWA, WAS, CPACC — Digital Accessibility Specialist

SUMMARY:

Web accessibility expert with experience designing, developing and managing development teams with attention to usability, inclusivity, and Section 508, WCAG, WAI-ARIA, ATAG compliance, desktop and mobile.

SKILLSET:

✦ Knowledge and experience in creation, identification, and remediation of accessible web content. Includes deep and applied understanding of WCAG (Web Content Accessibility Guidelines), ARIA (Accessible Rich Internet Applications, and ATAG (Authoring Tool Accessibility Guidelines).

✦ Hands-on experience in front end design and development. Includes a broad understanding of best practices in HTML, CSS, SASS, JS, YAML, Markdown. Knowledge of build and deploy processes, code linting, and integration with Git workflows.

✦ Understand architectural patterns, design systems, development principals and best practices, knowledge of web development landscape including multiple frameworks (Angular, Vue, React). Coordination of multiple projects with onsite and remote teams. Experience in Agile and waterfall product development lifecycle from design to production.

EMPLOYMENT HISTORY:

New Worlds Inclusive Design, LLC. Montara, CA (August 2020 - Present)

Digital Accessibility Consultant

✦ *Audited web sites and applications for compliance with accessibility standards (WCAG 2.1/2.1, ADA, Section 508), educating teams designing and developing software with inclusive principles for desktop and mobile views, facilitating remediations of existing issues.*

Completed an accessibility audit of the website for Trekkers, a non-profit outdoor education and youth mentoring organization in Rockland, ME. Audit encompasses UX functionality of site, issues found violating accessibility standards, and advice and assistance on remediation strategies.

Completed an accessibility audit of the website for Teatro Visión, a non-profit theater company in San Jose, CA. Submitted a report detailing evaluation findings including issues identified and provided detailed advice on prioritization of issues remediation and recommended best practices.

Enrolled as a volunteer for Lighthouse Center for the Blind in San Francisco, CA offering consulting services for blind and low-vision users using assistive technology.

joelmckinnon@new-worlds.org
650-619-3141

NASA-Ames (Bay Systems Consulting). Mountain View, CA (August 2019 - July 2020)

Front End Developer, Accessibility Expert

✦ *Developed and managed front end code for the Open MCT project, an open source software project used for multiple ongoing NASA projects including Artemis, Perseverance, and VIPER.*

Developed code in an agile Angular/Vue environment coding HTML, CSS, JS, WebPack, ESLint, Git. Audited and remediated multiple accessibility issues to meet Sect 508 requirements.

Features included spectrographic and linear time-series scattergraphs using multiple plotting libraries and a feature for applying conditional styles and annotations dependent upon complex input parameters. Also contributed to improvements in legacy code, updating to best practices for web desktop and mobile.

Apple. Sunnyvale, CA (April 2014 - May 2019)

UI Accessibility Expert

✦ *Led a project to resolve accessibility issues for internal Apple web applications used by Customer Service supporting desktop and mobile.*

Collaborated with UX designers, UI developers, and Testing teams to produce code meeting Apple's AA+ standard for web accessibility based on WCAG 2.0 specification.

AppleCare Web Chat UI Lead

✦ *Managed the development and release to production of AppleCare web chat for mobile devices serving IOS and Android platforms.*

Led a team of onsite and offshore developers to optimize AppleCare web chat for iPad. Created an emulation tool to facilitate development separated from back end tooling. Project utilized JSP, HTML, CSS, JS, jQuery. Instituted process and tooling improvements including front end build tools and GIT.

Core Chat UI Architect

✦ *Brought Apple's Internal Support Hotline chat application to production utilizing the Core Chat framework.*

Created a new framework for uniting disparate front end codebases targeting multiple devices and serving different business units (AppleCare, AOS, IST Helpline) into a core modular codebase capable of serving all business units. Utilized AngularJS, SASS, GulpJs.

Staffing Tools UI/UX Lead

✦ *Managed the technical design and development of multiple internal Apple applications including transition to significantly improved usability and performance.*

joelmckinnon@new-worlds.org
650-619-3141
Projects included supervising redesign and development of Apple internal provisioning application used across customer systems business units, and survey and monitoring applications involving complex forms and workflows.

✦ *Managed the UI redesign and development of Apple's internal sales web application.*

Led a project to create new UI for iSell. Developed a SASS-based approach to convert visual wireframes into a modular UI architecture with the Angular framework.

Sentilla Corporation Redwood City, CA (May 2010 - Mar 2014)

Senior UI Engineer

✦ *Developed key features in the UI for a SaaS application.*

Led a team developing and maintaining a highly scalable big data enterprise application requiring monitoring of thousands of datacenter and cloud-based assets.

Drove the transition to a modern, HTML5 based UI, utilizing jQuery widget-based framework with responsive layout utilizing compiled CSS3. Developed new features and maintained existing codebase. Implemented dynamic charts using D3.js framework.

Mediaplex, Inc. San Francisco, CA (Jan 2007 - May 2010)

UI Engineer

✦ *Developed key features in a production adserving application.*

Transitioned enterprise web app to table-based layout with CSS. Transformed the user interface for an enterprise web application from a tables-based layout with hard-coded HTML to a semantic CSS/Javascript modern UI with clean separation of presentation from content.

Developed rich media features in jQuery and Flex, including advanced navigation and graphical data visualization.

Macys, Inc. San Francisco, CA (Dec 2005 - Dec 2006**)**

XSLT Content Engineer

✦ *Developed feature pages for a high visibility national retail e-commerce website.*

Developed and maintained XSLT templates containing embedded JSP code for rendering frequently changing web pages for a first-class, high traffic e-commerce site.

joelmckinnon@new-worlds.org
650-619-3141

Adobe Systems, Inc. San Jose, CA (Jan 2005 - June 2005)

XSLT Architect

✦ *Designed, developed, and produced a templating framework to greatly simplify production of marketing materials.*

Designed and developed a new XSLT-based system for transformation of product information XML into marketing web pages for Adobe's corporate website in US and international editions.

Wells Fargo Bank, San Francisco, CA (Mar 2004 - Dec 2004)

XSLT UI Developer

✦ *Developed and maintained web features for a national online banking application.*

Front end web development position responsible for design and development of XML and XSLT architecture for online banking applications used by customers and bank employees.

Education

✦ *Deque University:*
  • *Accessibility Fundamentals: Disabilities, Guidelines, and Laws*
  • *Designing an Accessible User Experience*
  • *Semantic Structure and Navigation*
  • *Images, SVG, and Canvas*
  • *Visual Design and Colors*
  • *Responsive Design and Zoom*
  • *Multimedia, Animations, and Motion*
  • *Device-Independent User Input Methods*
  • *Form Labels, Instructions, and Validation*
  • *Dynamic Updates, AJAX, and Single-Page Apps*
  • *Custom JavaScript/ARIA Widgets*
  • *Web Accessibility Testing: Screen Readers*
  • *Web Accessibility Testing: Basic Methods and Tools*

✦ *Web-based training: React, Angular, Vue, Gatsby, Ember, Bootstrap, JavaScript, SASS, Eleventy*

✦ *Pennsylvania State University: B.S. Geoscience*

Certifications

✦ *Certified Professional in Accessibility Core Competencies (CPACC)*
✦ *Web Accessibility Specialist (WAS)*
✦ *Certified Professional in Web Accessibility (CPWA)*

Associations

✦ *Member: International Association of Accessibility Professionals*