



John is an Engineering Fellow with over 26 years of experience developing for the web. He is a Google Developer Expert in Web Technologies, an international conference speaker, LinkedIn Learning course author, and a standards specification editor. He loves solving technical challenges, but understands the biggest challenges in tech are human challenges. He influences with empathy instead of authority, and actively mentors the next generation of technology leaders. Specialties include Web Standards, HTML, JavaScript, CSS, Web Components, Web Performance & Open Source Software.

WORK EXPERIENCE

Comcast – Engineering Fellow – Philadelphia, PA **March 2020 - Present**

- Lead Client Engineer for the Xfinity iOS & Android applications, supporting over 10MM active monthly users.
- Instituted and leads our Advice Process for engineering discussions & decisions across all layers of the Xfinity app stack.
- Analyzed and architected cost-savings measures with multiple vendor products, saving over \$500,000 in 2024 to date.
- Lead Engineer for the content management system & server-driven UI architect for the Xfinity iOS and Android applications.
- Architected the Xfinity WiFi Captive Portal using Eleventy and AWS.
- Launched a Principals+ Guild for software engineers of all levels to discuss engineering challenges.
- W3C Advisory Committee Representative for Comcast Corporation (representing Comcast, NBCUniversal, and Sky).
- CTA WAVE HTML5 API Task Force Chair, including co-editor of the annual Web Media API Snapshot specification.
- CTA WAVE Steering Committee Representative for Comcast.
- Technical Advisor for Strategic-IP team for patent filings in the domain of client application development.
- Leader across multiple mentorship programs for Comcast.

Comcast – Distinguished Engineer – Philadelphia, PA **February 2015 - March 2020**

- Lead Frontend Developer for xFi, including the Progressive Web App, hybrid native app, and HTML5-based TV app.
 - Hire, trained, and mentored team of over 20 web developers.
 - iOS and Android apps both maintained 4+ star app store ratings.
 - Leveraged Redux architecture to use the same business logic code among all xFi web products.
 - Redux also enabled the team to migrate from a Polymer-based view layer to a React-based view layer with TypeScript
- Created and lead a Technical Design Review Forum for software engineers, product managers and designers to discuss ideas, libraries, and new patterns that span across multiple teams.
- Launched a Frontend Web Dev Guild to advise and collaborate with other Web Developers across Comcast on coding standards, frameworks, web performance, and accessibility.
- Co-authored the Xfinity app API Semantics specification to provide guidance to API teams when switching our API approach from an orchestration layer to microservice APIs.
- Open Source Software author, contributor & advisor for the company, providing technical feedback on potential Open Source projects at Comcast to the Open Source Program Office and legal teams.

Comcast Interactive Media – Principal Engineer – Philadelphia, PA **January 2011 - February 2015**

- Lead Frontend Developer responsible for customer facing websites receiving millions of page views per day, including xfinity.com, XfinityTV.com and Xfinity Stream.
- Architected and lead team building the original Xfinity Stream Web App using Backbone.js.
- Involved in prototyping for new web projects and defining coding standards, including Accessibility best practices
- Led efforts to migrate the web development stack from FreeMarker Templates with Java to Ruby on Rails with Sass.
- Architected and implemented the systems and code to monitor and improve website performance.
- Released some of our Sass, Compass and website performance code as some of Comcast's first Open Source Software, leading to the creation of Comcast's Open Source Advisory Council.
- Co-lead training for Git and GitHub.

Comcast Interactive Media – Manager, Engineering – Philadelphia, PA **November 2008 - January 2011**

- Managed team of Frontend engineers and Technical Leads.
- Managed Frontend development and delivery of Comcast.net & Xfinity.com via Agile scrum processes.
- Technical Lead for the launch of Xfinity.com.

Comcast Interactive Media – Web Developer – Philadelphia, PA **July 2007 - November 2008**

- Frontend UI Technical Lead for major feature development for Comcast's online portal, Comcast.net.
- Leveraged web standards, XHTML, CSS, and JavaScript with the FreeMarker Java Template Engine and Akamai CDN.

Allegis Group – Web Developer / Web Designer – Hanover, MD **October 2005 - June 2007**

- Designed and coded ASP.NET websites with web standards, including teksystems.com, aerotek.com, and the internal system used by recruiters to find and place job candidates.
- Improved accessibility, usability, and design of external websites and internal web applications using semantic markup (XHTML & tableless-CSS) integrated with an ASP.NET backend.

Cygnus Interactive – Senior Web Designer – Beltsville, MD **July 2004 - October 2005**

- Designed & developed both new & existing websites for Cygnus Business Media's publications, expos, and web portals.
- Converted designs to live websites using XHTML, Flash, and tableless-CSS layout techniques with Cygnus' custom CMS.

Mindbridge Software – Web Designer / JavaScript Developer – Norristown, PA **September 2003 - July 2004**
- Created dynamic HTML pages with JavaScript and CSS for their Intranet software web application product.
- Designed and created Flash product demonstration, which increased software downloads.
- Designed graphics for Mindbridge's website and web application, including customized "skins" (custom graphics and CSS).
- Handled phone and email support.

Interact Multimedia, Inc. – Flash Intern – Monmouth Junction, NJ **September 2002 - April 2003**
- Assisted with Flash projects for the web and CD-ROM.
- Created storyboards and Flash animations, designed graphics, edited images and sound.

JKM Products Corporation – Webmaster – Berlin, NJ **September 1997 - January 2003**
- Fully designed & developed the secure online web store for jkmribbon.com using the TAME (Tag Activated Markup Enhancer) Language, as well as a retail version using Yahoo! Store Templates (RTML).

EDUCATION

Master's of Computer and Information Technology (MCIT), University of Pennsylvania, Philadelphia, PA **Graduated 2022**
BFA Graphic Design, Web Design and Flash Specialization, The College of New Jersey, Ewing, NJ **Graduated 2003**

PUBLICATIONS

CSS to Sass: Converting an Existing Site, LinkedIn Learning Online Course **Published February 2016**
<https://www.linkedin.com/learning/css-to-sass-converting-an-existing-site/>

CONFERENCE WORKSHOPS AND TALKS

- "Web Components Across Frameworks": Presented at ÜberConf, 7/17/24
- "Intro to Web Components with LitElement": Presented at ÜberConf, 7/20/23
- "Progressive Web App Workshop": First facilitated at ÜberConf, 7/18/23
- "Intro to Web Components Workshop": Facilitated at 14 conferences, including Node+JS Interactive
- "The Art & Science of Decision Buy-In": First presented at StaffPlus New York, 4/5/22
- "Developing New W3C Web Platform Features": First presented at the Progressive Web Experience, 12/7/21
- "Future-Proofing Your JavaScript Framework Decision": First presented at the University of Illinois Web Conference, 4/5/19
- "The Critical Career Path Conversation": First presented at The Lead Developer New York, 4/24/18
- "Polymer-Powered Design Systems": First presented at DevFest Florida, 11/11/17
- "Web Components: The Future of Web Development is Here": First presented at MinneWebCon, 5/1/17
- "Polymer in Practice @ Comcast": Invited by Google to present at The Polymer Summit in London, 10/18/16
- "Custom Elements with Polymer Web Components": First presented at the Web Conference at Penn State, 6/14/16
- "The Truth About Your Web App's Performance": First presented at JSConf, 5/28/14

For the full list of over 50 presentations, including links to video recordings, please see johnriviello.com

PATENTS

- US 9667730: Systems And Methods For Abandonment Detection And Mitigation. Issued May 30, 2017.
 - Continuation: US 10630790: Issued April 21, 2020.
 - Continuation: US 11283889: Issued March 22, 2022.
- US 10733246: System and Method for Identifying a User. Issued August 4, 2020.
 - Continuation: US 11157580: Issued October 26, 2021.
 - Continuation: US 12061657: Issued August 13, 2024.
- US 11252155: Systems and methods for on-network device identification. Issued February 15, 2022.
 - Continuation: US 11750613: Issued September 5, 2023.
- US 12063418: Detection and Redirection of Video Playback. Issued August 13, 2024.
- 2 additional patents have been filed and are currently pending.

HONORS & AWARDS

- Google Developer Expert, Web Technologies. January 2019 - Present.
- Comcast: Circle of Success Product Innovation Award for xFi Product Launch Team, 2017
(The Circle of Success Awards for 2017 selected 28 award winners out of over 1,200 nominations)