

JASON JOHNSTON

Web UI and Data Visualization Engineer

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Portfolio: lojjic.com

WHAT I DO

I am a web developer with twenty years of experience building rich front end user interfaces, with a recent focus on data visualization in two and three dimensions. I use my broad and deep technical knowledge and design sensibility to push the limits of the web platform and create apps that are beautiful, responsive, and a pleasure to use.

I'm a highly analytical thinker, an extremely fast learner, and a friendly collaborator who thrives in fast-paced team environments. I constantly push myself to learn, invent new things, and do it better each time.

WHAT I BELIEVE

- ▶ My first duty is always to make a fantastic user experience.
- ▶ The “how” is very important, but must always be in service of the “why.”
- ▶ The difference between a good app and a great app is in the tiny details. I have the critical eye to notice them, and the skill and patience to get them right.
- ▶ A strong, open web platform is crucial to the future of technology.

WHERE I'VE WORKED

ProtectWise / Verizon • Staff Engineer

2014 to now • Denver, CO

As a primary developer of the ProtectWise Visualizer, I was responsible for creating a uniquely beautiful, usable, efficient user interface and rich data visualizations, enabling security analysts to quickly respond to network threats.

I was instrumental in architecting much of the codebase, constantly evaluating new tools and frameworks and refactoring as needed, always in service of an improved user experience and maintaining the highest quality. Collaborating side-by-side with UX designers, I rapidly prototyped concepts in code using real data to validate ideas and gain insights in an iterative process.

Ambitious to innovate, I took ownership of the design and development of many new 3D data visualizations using WebGL and eventually WebXR, enabling new insightful ways to interact with extremely large network security datasets. To drive these efforts I created and open-sourced a new framework, *Troika JS*.

Open Source Contributions

Always • Everywhere

It's good to give back! I have contributed to many open source projects over the years, and have published several of my own, including:

- ▶ *Troika JS* • <https://protectwise.github.io/troika> • A declarative framework and set of tools for managing interactive 3D graphics, focusing on data visualization and performance. Its text rendering module, *troika-three-text*, is considered state-of-the-art in the Three.js community, and it won “Framework of the Year” in the inaugural *WebXR Awards*.
- ▶ *CSS3 PIE* • <http://css3pie.com> • A polyfill for CSS3 features in IE6-9.

Sencha • Senior Software Engineer

2010 to 2014 • Remote from Denver, CO

I was a lead engineer working on *Sencha Architect*, a web-based visual IDE for creating webapps using the Ext JS and Sencha Touch frameworks. I architected much of its code, performed UX research and design, led a team of developers, worked directly with users, wrote documentation, and gave public technical presentations.

Local Matters • Senior UI Engineer

2008 to 2010 • Denver, CO

I helped develop several global directory search websites, and the common front end platform driving them all, while mentoring several junior developers.

Intrado • Software Engineer

2004 to 2008 • Longmont, CO

AIVIA / Akili • Senior Web Publisher

2000 to 2003 • Dallas, TX

TECHNOLOGY SHORTLIST

- ▶ HTML5
- ▶ CSS3
- ▶ JavaScript (ES5 - ES2020)
- ▶ Typescript
- ▶ React.js, Redux, MobX
- ▶ DOM, SVG, Canvas
- ▶ WebGL, GLSL, Three.js, WebXR
- ▶ D3.js
- ▶ Usage and design of REST APIs
- ▶ Node.js

EXTRACURRICULAR

I love music and am a classically trained pianist. I find music and engineering are closely related, both using similar parts of the brain to create a blend of art and science.