

Jack Sola (Simpson)

hey@jacksola.com

WEB VIZ ARCHITECTURE & UX CONSULTANT

Consultant and creative technologist specializing in React, Three.js, and full-stack web applications that bring data and stories to life. I design and build performant, scalable interfaces—from interactive 3D environments to production-grade SaaS products. Over a decade of experience delivering award-winning visualization and UX work for organizations including NASA and Disney. Currently consulting on web architecture, UX strategy, and product prototyping for emerging ventures.

TECHNICAL EXPERTISE

JavaScript • TypeScript • HTML • CSS • Python • GLSL • Next.js • React Three Fiber (R3F) • D3.js • Vue

DESIGN & VISUALIZATION TOOLS

VS Code • Cursor • Figma • Adobe Creative Suite • Maya • V-Ray • Blender • Nuke

LANGUAGES

English (British native, occasional American twang) • German (B1 officially)

EDUCATION

MSc. 3D Computer Generated Imagery - *Kingston University, UK*

BSc. Animation Technology and Special Effects - *Leeds Beckett University, UK*

WORK HISTORY

Independent Consultant: Full Stack & UX Architecture

Oct 2024 – Present

- Designing and developing full-stack web applications, from UX architecture through production deployment.
- Providing consulting on user experience strategy, system architecture, and data modeling, bridging design, product, and engineering.
- Building maintainable modern tech stacks including Next.js, Tailwind CSS, with scalable Supabase / Postgres backend structures.
- Creating interactive “vibe prototypes”- rapid, code-based explorations of motion, timing, and user flow to refine UX direction and product feel.
- Advising on component-driven design systems, accessibility, and performance optimization for consistent, high-quality product experiences.
- Exploring agentic AI system workflows from MVP through to production.

NASA Jet Propulsion Lab: Senior Web Visualization Engineer

Feb 2021 – Sep 2024

- Led front-end architecture for NASA's Eyes educational visualization suite (React + proprietary framework) used by millions worldwide.
- Architected real-time 3D solar-system visualizations using spacecraft and asteroid data; optimized load times through asset and shader improvements.
- Directed UX prototyping and usability loops with design and science teams, improving user retention and learning outcomes.
- Mentored engineers and designers on scalable 3D visualization practices and performance standards.
- Awards: Webby Award + NASA Honor Award (2023) for Eyes on Asteroids.

MJD Interactive / Valtech: Senior Web Developer

Apr 2018 – Nov 2020

- Built and led development of interactive experiences for clients including Disney, Intuit, and MagMutual, blending animation, data visualization, and real-time 3D.
- Directed technical strategy and implementation of React + Three.js/WebGL front ends.
- Collaborated cross-functionally to align creative design with technical performance goals.
- Awards: 2 Webby Awards.

Earlier Dev Experience: Interactive WebGL Developer

2015 – 2018: The Molecule • Macy's • Society for Neuroscience • HUGE

- Delivered real-time visualization pipelines and motion-graphics workflows across broadcast, retail, and research sectors.
- Created custom GLSL shaders and optimized asset pipelines for 3D and WebGL.
- Led small technical teams producing data-driven, cinematic web experiences.
- Awards: 3 Webby Awards

Earlier VFX Experience: 3D Generalist & Technical Director

2009 – 2015: Framestore • Animated Storyboards • Eyeball NYC

- Produced 3D animation, visual effects, and compositing for broadcast, film, and experiential projects.
- Developed Python-based tools and pipeline automation for Maya and Nuke.
- Contributed to technical direction, lighting, and simulation workflows across multidisciplinary teams.
- Built early expertise in render optimization and procedural asset creation, forming the basis for later real-time work.

SELECTED CLIENTS & PARTNERS

NASA • Disney • Intuit • MagMutual • Amazon • Samsung • HP • Hyundai • Macy's • NFL • SAP • Budweiser