



SHOJI USHIYAMA

🏠 shojiushiyama.net

✉️ shoji.ushiyama@proton.me

🌐 linkedin.com/in/shoji-ushiyama

PROFESSIONAL SUMMARY

Force multiplying product designer. Specialises in B2B(2C) workflow UX and design strategy for technical domains. Creates frameworks and tools that enable teams and professional users to tackle complex challenges independently, with experience spanning surgical robotics, freelancing automation tools, and aerospace simulations.

- **ArtDash:** Revitalised 2-year-stalled B2B2C freelance automation platform through comprehensive user research campaign.
- **Revolve Surgical:** Developed strategically-informed product vision for stealth medical startup's B2B device ahead of Series A.
- **Anthrocon:** Leads team of 10 developing content governance policy and strategic initiatives for event with \$20M+ local impact.
- **Systems & tooling:** Develops & socialises design frameworks and workflow automation tools across multiple technical communities.

EXPERIENCE

Independent Product Designer · Apr 2024 – Present

Remote · Toronto ON

- Co-leads design group within Never Search Alone job search community, facilitating workshops and group discussions. Provides feedback and guidance to designers, engineers, and product managers across multiple levels of seniority (juniors to directors).
- Developed technical capabilities in VR asset design, automated procedural generation, generative AI, and React. Created and socialised tools for creative and technical communities.
- See **projects section** for details on design & technical projects.

Senior Product Designer · May 2023 – Apr 2024

[Revolve Surgical](#): B2B medical technology startup developing robotic workflow solutions for surgeons and hospitals.

Hybrid · Toronto ON

- Developed strategic product direction from CEO, CTO, and cross-functional team input, aligning 8 stakeholders on Series A strategy. Transformed 140+ regulatory constraints into systematic design framework for investor presentations.
- Designed device information architecture for surgical robots that enables OR staff to monitor multiple devices during high-pressure procedures. Created scalable indicator system prioritising critical alerts based on user proximity and role.
- Prevented 8-12 month development detour by conducting critical user research that revealed ethical issues with surgeon analytics app. Identified procurement tracking as alternative business opportunity.
- Collaborated closely with engineering team to develop "North Star" aspirational concept and feasible "Tone" implementation roadmap. Balanced manufacturing constraints, regulatory compliance, and design viability.

Lead Digital Photographer · May 2022 – Present

Anthrocon: Leading 10 direct reports at arts & culture event with 18,000+ annual attendees contributing \$21M+ to local economy.

Remote · Pittsburgh PA

- Represents department interests to 15 internal & external groups, facilitating cross-departmental projects. Coordinates with 8 partner hotels to create photography showcasing unique amenities to improve attendee satisfaction and distribution.
- Stewards asset library of 1500+ photos saving teams 150+ hours annually in sourcing and licensing. Collaborates with PR & social media teams to develop communications strategy and reduce manual asset searching.
- Develops operational policies and quality standards through iterative feedback with director and team of 10 direct reports. Leadership approach now championed by director as template for other departments.



Independent Digital Freelancer & Creative Consultant · Feb 2015 – May 2022

Remote

- Built 7-year creative practice through close client collaboration. Delivered 160+ projects refined through iterative feedback cycles across graphic design, brand design, and concept development.
- Collaborated with domain experts including nuclear engineers, political scientists, and electronic music producers. Assisted clients in breaking through conceptual challenges by translating complex technical concepts into accessible visual forms.
- Created prototype-testing framework that balanced innovation with client trust. Launched experimental services at reduced rates to validate workflows before full deployment, generating significant repeat business and referrals.

PROJECTS

KSP Restock PBR: Asset governance and procedural tools for rendering pipeline overhaul · Feb 2024 – Present

- Contributing to scoping criteria governing rework of 250+ game assets. Co-managing community-wide transition to unified PBR/deferred graphical rendering pipeline.
- Developing and deploying procedural texture generation tools to address manual process inefficiencies. Realistic spacecraft foil texture generation based on Gabor noise algorithm adopted as community standard for asset authoring.

Texel Density Gallery: Educational VR world exploring and promoting technical-visual standards · Aug 2024 – Sep 2024

- Developed controlled testing environment to validate visual quality and performance benchmarks across multiple use cases and platform constraints (VR/desktop). Researched professional industry standards to inform inhouse standards for VR use.
- Designed technical guidelines defining concrete baseline metrics and exception criteria for texture optimisation. Established educational, decision-making framework for creators to autonomously balance technical requirements and visual fidelity.

KSP CryoEngines Extensions: Systematic, player-centric design frameworks for spaceflight simulation · Jun 2023 – Aug 2024

- Performed quantitative analysis and aerospace engineering research to develop new balancing standard. Established centralised knowledge base and socialised new development process as community standard.
- Deployed internal procedural generation tooling, reducing asset creation time by 20-40% and eliminating 2 manual steps. Maintained cohesion with established visual style while accounting for deviation for edge cases.
- Directly mentored 2 creators who successfully released 4 additional addons accumulating 28,000+ downloads by applying new development framework.

[ArtDash](#): B2B2C e-commerce platform strategy through systematic community workflow analysis · Apr 2024 – Jun 2024

- Unlocked 2-year-stalled project by identifying blue ocean market opportunity through comprehensive user research campaign. Revealed hidden client journey patterns that redirected product strategy from social platform to automation tool.
- Secured engineering commitment to creator-centred MVP by translating qualitative research into data visualisation. Bridged gap between complex community dynamics and technical requirements while making tough scoping decisions.
- Validated new approach by building, iterating, and testing interactive prototype with real-world freelancers and clients. Established foundational UI component library to enable rapid iteration and future product scaling.

["Han" Language Translator](#): Experimental React webapp translating natural Japanese to fictional pseudo-language · May 2024

- Accelerated pseudo-language design iteration by developing frontend webapp to replace manual conversion algorithm testing. Reduced design validation cycle time and enabled rapid experimentation with conversion rules.
- Diagnosed and resolved critical build compatibility issues between Vite and Kuromoji language parsing library. Identified root cause with maintainer and implemented workaround (switching to Next.js framework).

EDUCATION

UX/UI Design, BrainStation

Certificate · UX research, UI development & prototyping

BDES Industrial & Product Design, OCAD University

Undergraduate degree · Equiv. GPA 3.9



TOOLS

Design tools: Figma, Maze

Collaboration: Miro, FigJam, Notion, Jira, Slack

Prototyping & development: HTML/CSS, Javascript, React, Unity & C#, Webflow, version control (Git), data visualisation (d3, visx)

3D & visual: Blender, Adobe CC (Photoshop, Illustrator, InDesign, Lightroom), SolidWorks, Fusion

Research: Google Analytics, Microsoft Excel (statistical analysis, ANOVA, F-distribution), generative AI (Anthropic Claude, GPT4All)

CORE COMPETENCIES

Framework architecture: Creates systematic approaches that enable teams to tackle complex challenges independently and at scale.

Cross-domain translation: Bridges specialised knowledge domains into unified design strategies and accessible frameworks.

Research-driven synthesis: Conducts primary research and data analysis to uncover hidden patterns in complex systems.

Multi-constraint optimisation: Simultaneously balances regulatory, technical, user, and business requirements in cohesive solutions.

Knowledge systematisation: Converts tacit expertise into explicit methodologies that others can apply and extend independently.

Technical foundations: Applies data analysis and cross-platform thinking (VR, mobile, desktop, physical) to product challenges.

SKILLS

Strategic: North star vision development, 0-1 product creation, feature roadmapping & prioritization, systems thinking & framework architecture, business metrics understanding, cross-functional collaboration.

Technical: Design systems (development, scaling, governance), component libraries, responsive cross-platform design (mobile, desktop, tablet, VR), wireframing & prototyping, technical constraints navigation, accessible design standards (WCAG 2.2 and APCA), Atomic design principles, visual and graphic design.

Research: Outcomes-based metrics, qualitative & quantitative data analysis, research synthesis, competitor analysis & market positioning, user journey/experience mapping, usability testing.

Process: End-to-end design process (discovery to delivery), lean UX methodology, information architecture & navigation systems, holistic workflow design.

Collaborative: Visual storytelling & concept articulation, cross-functional team leadership, design documentation, technical communication.

