Shaobo Liu

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Portfolio

Work Experience

Freelance Industrial Designer

Multiple Companies August 2023 - Present

- Turn 2D sketches into 3D models using SolidWorks, Fusion 360, enhancing design visualization for the launch of a fly-fishing game through use of KeyShot and Adobe Suite.
- Full stack product design service including research, usability testing, interaction, and visual design from concept to production.
- Delivered high-fidelity models to conduct rapid user experience testing and iterate design based on feedback and design intent.
- Coordinate the manufacturing of mass production samples for sale in North America.

Industrial Designer

PawLi

October 2024 - Present

- Led end-to-end product development including research, ergonomic studies, CMF direction, user testing, and mechanical layout exploration.
- Delivered high-fidelity CAD assemblies and rapid prototypes to evaluate usability, fit, and attachment mechanisms, iterating based on user insights and design intent.
- Coordinated with oversea manufacturers to review samples, refine DFM details, and prepare the product line for mass production.

Design Shop Technician

RISD

Jan 2025 - June 2025

- Oversaw the end-to-end product process for students and faculty to ensure project completion.
- · Utilized SolidWorks for mechanical design engineering and CNC machining.
- Facilitated hands-on product design learning by imparting technical production strategies for student works.

Design Consultant

Calligaris

August 2022 - July 2023

- · Create high-fidelity 3D visualizations for clients using AutoCAD and Coohom.
- Leverage field studies to conduct comprehensive space planning for high-profile clients.
- Collaborated with licensed designers to deliver custom solutions based on client needs.
- Lead a team of 3, developed and launched e-commerce sites for furniture brands enabling 92% of their inventory to be sold online.
- Craft digital experiences that boosted sales of products by designing social media campaigns that boost visibility by 58%.

Industrial Designer

Coco&Ava

January 2023 - February 2025

- Institute a comprehensive design strategy by blending visual storytelling with pre-order product strategy to address market gaps and enhance user experience.
- Collaborated with local culinary incubators to streamline product development resulting in rapid market entry.
- · Lead a team of 12 to develop brand identity, packaging, and designs using Figma.
- UX designer on heuristic evaluations and platform usability across internal teams.
- \bullet Conducted user testing sessions to refine category strategy, applying insights to optimize the customer experience.

Education

Rhode Island School of Design

Pennsylvania State University

MID Industrial Design

BFA

Process

Skills

| 3D |
|--------------------------|
| SolidWorks Fusion 360 |
| Keyshot Rhino |
| Blender |
| Prototyping |

3D Printing

Photoshop Illustrator InDesign Premiere Pro Sketching Figma

2D

Consumer research Competitor analysis AI design CMF Prototyping User testing Design for manufacture Language English Mandarin

Mongolian

Projects

TUBO

Toy design 2024-2025

- Design, engineer, and manufacture an educational building toy system for preteens from ground up.
- Iterate design choice based on rapid user testing session and challenging during fabrication.
- Outreach and source manufacturer for sustainable industrial standard paper tube material.
- Design and manufacture connectors to reach load bearing purpose through 3D printing and mold design.
- Innovate clip-on mechanism to reach weight load and user-friendly balance.

PawLi

Dog leash design 2025

- Led the concept development and main design direction for Project PawLi, guiding a team of 3 through 4 major iterations.
- Conducted user research and testing to inform design decisions and guide rapid prototyping.
- Delivered a user-centered final product by refining both form and function through iterative development for fast market entry.

Resolution Chair

Furniture design 2021

- · Design and produce a load baring lightweight cardboard chair
- Design for manufacture, and assemble during the production period
- Enable and support up to 250 lb. with only 10 lb. of material
- $\boldsymbol{\cdot}$ Own design from concept to production, designed for CNC cut, Pepakura for preparing printable file

Fly-fishing

Game design 2023

- Translate design intent into construction drawing, deliver clear instruction for fabrication.
- Produce and prototype the mock up version using MDF and steel for instant visualization and testing.
- Optimized the design using insights from user testing and research to ensure retail readiness

Beyond Packaging

Packaging design, material 2024

- Repurpose tea waste into biodegradable bioplastic and bio-foam that not only protects products but also extends their function life.
- Design a new bio-material from scratch aimed for a sustainable, zero-waste experience product line, serving as a scented shell.
- Conduct user testing sessions on multi-sensory engagement, to ensure surface texture, weight, and scent meets packaging needs.
- Challenge traditional packaging's end-of-life narrative by embedding post-use utility and aesthetic appeal into the design language.

BUY2BE

Design with Al 2025

- Conceived and developed BUY2BE, an Al-generated children's storybook exploring the ethical and emotional impact of Al on identity, learning, and self-growth.
- Used speculative storytelling as a design tool to translate complex topics such as Al augmentation, human agency, and creativity into an accessible format.
- Demonstrated a design philosophy that prioritizes human-centered, meaningful technology over purely functional or efficiency-driven solutions.
- Showcased strengths in concept development, storytelling, ethical design thinking, and creative use of generative AI tools.