Designer, Developer + **Creative Technologist**

dszhu.design@gmail.com dszhusd.vercel.app/ 224 436 1474

Experience

Creative Technologist Contractor @ Landing Gear NY x Pilot Flying J

03/2024 -05/2024

Built an immersive semi-truck simulator experience for the 2024 Berkshire Hathaway annual shareholders meeting with a total throughput of 300+ visitors over the course of 2 days.

Designed and fabricated an embedded hardware and web-based system to convert a semi-truck into a simulator game controller. Researched and installed displays, sound, and haptic feedback for sensory immersion. Acted as the technical lead for production implementation. Designed the UX journey for visitors and acted as a brand ambassador guiding visitors through the experience.

Creative Technologist Contractor @ Landing Gear NY x Google x PODS

06/07/2024 -06/11/2024

Created a navigation system and optimized a 50+ hour route to 28.5 hours, guiding a truck-mounted LED billboard through all 299 NYC neighborhoods.

Wrote python scripts to clean and cross-check neighborhood data from NYC.gov. Added location data from Google Maps' geocoding API for route optimization and AI generated headlines from Google Gemini for the LED billboard.

Formatted the route and data to be accessible and user-friendly for multiple teams of camera crew and chaser cars. Coordinated route communication between crews during the drive.

Creative Technologist Intern @ Lippincott Consulting

06/2023 -12/2023

Researched and developed a full-stack web-based AI tool for internal use with React and Flask implementing openAI and Stable Diffusion APIs. Created a VR data visualization and brand showcase application with Unity, Cesium, and external APIs.

Prototyped and developed interactive articles focusing on novel web interactions with React.js and Framer.js.

Digicon Monitor @ Carnegie Mellon

08/2022 -05/2023

Mentored students with project fabrication and manufacturing techniques - laser cutting and Raise3D printing. Made resources and training available for over 60 previously excluded students.

Teaching Assistant @ Carnegie Mellon

01/2023 -05/2023

Taught a class of 15 students digital fabrication and electronic prototyping skills and techniques: laser cutting, 3D printing, Arduino, motion tracking, and Unity.

Design Engineer Contractor @ Nen Creative

05/2024 -Current

Designing low and high fidelity UI/UX wireframes for web with Figma. Ensuring responsive design choices through iterative testing. Implementing designs through Webflow, specializing in features requiring custom code.

Translating engineering requirements for clients with expanded technical needs. Animating motion graphics for technical diagrams with Adobe After Effects and Lottie animations.

UI/UX and VR Designer @ Biomotivate

01/2020 -08/2020

Designed a dashboard to visualize biometric data for patients recovering from opioid addiction for clinician use. Conducted user research at 3 local clinics to establish baseline features and a prototype based on feedback from both patients and clinicians.

Research Assistant @ Carnegie Mellon

01/2022 -05/2022

Built a front end framework for Falcon, a interactive big data visualization tool, with Yarn, Svelte, and Typescript. Falcon reduces latency and computation time, resulting in 50 fps for multiple linked visualizations and billions of data points.

Education

Carnegie Mellon University

08/2019 -05/2023

Design Major, Human Computer Interaction + Physical Computing Minors. GPA 3.55, Deans List Spring 2023

Tools + Skills

UI Design, UX Research, Wireframing, Prototyping, Interaction Design, Design Drawing/Visualizing, Systems Thinking

Design

Photoshop, After Effects, Illustrator, Figma, XD, Blender, Rhino, Unity, Solidworks, Fusion 360, KiCad, Max MSP, Unity, Touchdesigner

Software

HTML/CSS, Javascript, Typescript, React.js, Svelte.js, Python, D3, Node.js, Java, Go, openFrameworks, C#, Processing, P5.js, threejs

Coding

3D Printing, Laser Cutting, Raspberry Pi, Arduino,

Physical

Soldering, Wood Shop, PCB Design