

Software Engineer | Visual Designer | Web Developer

Savvy software developer and web designer with a relentless drive and high standards for presentation and design aesthetic. Conceptualizes original website design ideas that bring simplicity and user-friendliness to complex design. Oversees production and promotes design guidelines, best practices and standards. Brings excellent visual design skills with sensitivity to user-system interaction.

competencies

Software Design

System Architecture

Software Engineering

Object Oriented Programming

Graphical User Interfaces

Computer Aided Design

Attentive to Detail

Direct Communicator

Visual and Artistic Acumen

experience**Software Developer****2023 - 2025**[LisaGUI](#) • Philadelphia, PA

Developed a “web OS” from scratch in vanilla JavaScript to fully simulate the experience of using Apple’s Lisa Office System, a desktop OS from 1983, entirely within a browser window. The project gained coverage in both niche and mainstream outlets.

- Designed a hierarchical layout system independent of the DOM and a custom 1-bit HTML5-canvas-based graphics system with blending modes, resulting in an interface with pixel-perfect accuracy and consistency across all modern browser engines.
- Constructed a UI framework and windowing system which were used to build multiple fully-featured applications using the Lisa OS’s original design language, including a file manager and a word processor.
- Implemented a typesetting system supporting mixed fonts, algorithmically applied type-styles, and limited kerning capabilities resulting in period-accurate font rendering.
- Developed an IndexedDB-based file system with limited versioning support, enabling users to save and access changes locally for improved offline usability.

Developer / UI Designer**2020 - 2021**[lorie.gallery](#) • Philadelphia, PA

Developed a custom-built artwork gallery website for a professional artist, including assorted marketing materials. Design goals for the project included mimicking the aesthetics of a white-cube museum gallery and the creation of a long-lasting portable software system with minimal dependencies.

- Designed a lightweight and responsive front-end UI using vanilla JS and CSS resulting in an elegant, visually distinctive, and relatively future-proof site design with no bloat and fast loading times.
- Programmed a [back-end editor](#) (using Python 3) with a locally hosted web-based GUI, simplifying the process of adding and editing the gallery database without any need for external dependencies and frameworks.
- Developed and implemented a system for photographing and cataloging a large, disorganized artwork collection, yielding a comprehensive quantity of work for display on the site. (Photoshop and Pixelmator were used to correct optical aberrations.)

2019 - 2020

Responsible for defining project requirements, UI design, development and customization of the new HR portal using ServiceNow. This included the creation of user criteria and queries using the Glide Server API.

- Completed cataloging and migration of data from an older portal system; the modularity of the new system allowed for a 66% reduction in the number of pages of content.
- Eliminated use of a legacy software system, reducing expenses by \$200,000 annually.
- Led a training class of 50 HR associates on the usage of the HR portal's back-end.

2015 - 2016

Worked on renovation projects primarily for educational clients, including The University of Pennsylvania. Conducted site surveys, and prepared schematic designs and construction documents using AutoCAD.

2013 - 2015

Collaborated with other members to troubleshoot computer hardware problems. Facilitated the disassembly, data erasure, and reassembly of computers. Delivered refurbished machines to community organizations.

education

2019

Concentrations: Software Engineering, Human-Computer Interaction

Minor: Architecture

technology

Adobe Creative Suite
Trimble SketchUp