JASPER KATZBAN

ENGINEER & DESIGNER

CONTACT

Email
jasperkatzban@gmail.com

Phone
(845) 667-6760

Portfolio
jasperkatzban.com

Github
@jasperkatzban

SKILLS

Technical
Python, JS, React, HTML, CSS, C, C++, MATLAB, Processing, GCP, AWS, Git

Creative
Adobe Suite, Figma, Sketch, Framer X, Blender, Audio & Video Production

Soft Skills
UX Research, Project Management, Technical Documentation, Agile Dev.

RELEVANT COURSEWORK

Software Design
Data Science
Modeling & Simulation
Software Systems
Data Structures & Algorithms
Sustainable Design
User Oriented Collaborative Design
Materials Consumption & Impact

EXPERIENCE

Ancient Ritual - 2021 to Present (Summer Internship, then Part Time)
Collaborating with head designer and lead engineer to produce immersive, wellness-focused audiovisual experiences. Developed Python / MIDI / DMX tooling to design and visualize custom theatrical lighting. Helped establish audio branding and produced custom music and soundscapes for user demos in Ableton Live.

Accessible Design Group at Olin College - 2021 (Research Position)
Performed UX research and product design for an iPhone app to help blind and low vision individuals navigate the built world. Implemented mobile analytics pipeline in Swift, Firebase, & Python.

Freelance Design Services - 2018 to Present
Providing web design & development, 2D / 3D content creation, and digital & brand strategy consultation to non-profits and startups in the sustainability and social impact fields.

FEATURED PROJECTS

Automated Hydroponics Dashboard - Spring 2022 (present)
Designed and deployed interfaces to monitor water quality in a local community hydroponic garden. Designed and tested UI prototypes in Figma. Integrated with back-end data pipeline using Apollo / React.

CantoVario: Musical Variations via Chaos - Spring 2021
Researched and developed user interface prototypes for a novel tool to help musicians iterate on their compositions. Led R&D process in Miro, Framer, and JS / React, testing weekly with a user group.

Inequity in Spotify's Recomendation Algorithm - Fall 2021
Used graph theory to explore biases in Spotify's song recomendation algorithm. Used Python / NetworkX to model and analyze artist data from the Spotify API. Presented findings in a Jupyter Notebook.

Surface Player - Fall 2021
Created a record player synth which scans objects and generates sound based on their geometry in real time. Implemented & optimized OpenCV, Python audio synthesis, and motor control stack on a RasPi.

Return Design - Spring 2021
Designed logos, brand identity, and teaching tools for social impact non-profits as part of a student-populated design firm at Olin College.

EDUCATION

Olin College of Engineering
BS Engineering: Computing & Design (2019-2023)
Recipient of 4-yr 50% Olin Merit Scholarship | GPA: 3.8

Activities: Hydroponics Automation, Public Interest Tech Group, Sustainable Materials Collective, Entrepreneurship Club Co-Director